15¢ A COPY

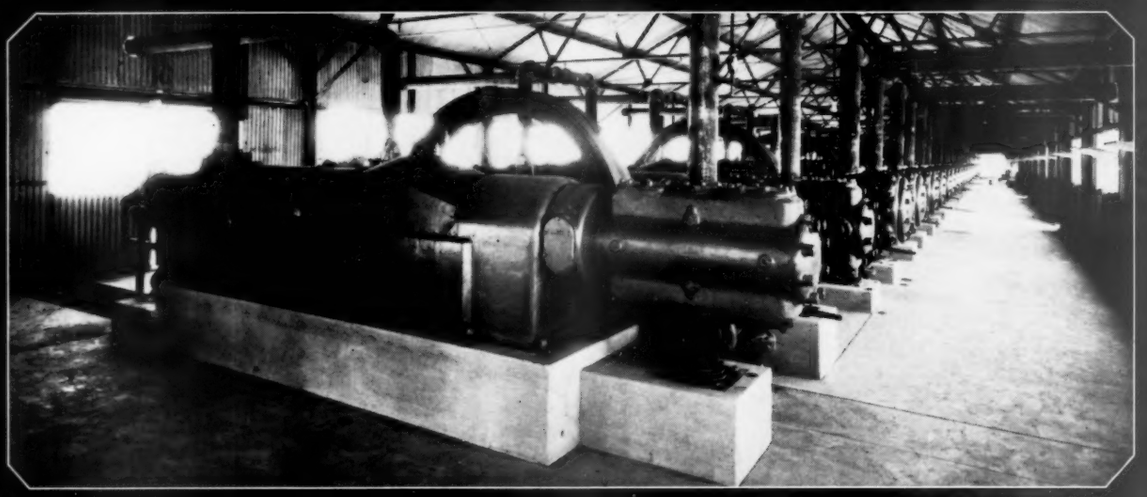
The OIL WEEKLY

Exclusively Devoted To The Production and Transportation of Oil and Gas

Engineering News Statistics

August 29, 1930 Volume 58. No. 11

"SUPER 2s" KEEP



RUNNING !

CLARK "Super 2-Cycle" machines record mighty near 100% running time. .... Simple, rugged construction—no valves to grind—no exhaust nor air inlet cams with heavy rocker arms open to dust and grit—very simple governor—dependable, automatic lubrication—oversize bearings—all these factors in almost perfectly continuous operation.

Shown above are 200 H.P. Twin Engine "Super 2s" in a Phillips Petroleum Corporation plant at Pampa, Texas.

CLARK BROS. CO.

OLEAN, N. Y.

Mid-Continent Sales Offices: Tulsa and Fort Worth. *Warehouses:* Tulsa; McCamey and Sweetwater, Texas; Artesia, N. M. *Export Office:* 150 Broadway, New York, N. Y. *California:* Smith, Booth, Usher Company, 228 South Central Avenue, Los Angeles, California.

CLARK

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 3301 Buffalo Drive, Houston, Texas. Subscription price $1.00 per year; 15 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

Study the DETAILS of GASO PUMPS

DETAILED examination of GASO Pumps reveals clearly why these pumps are so efficient in the use of power, so durable and so economical to maintain. For example note the connecting rods of GASO Fig. 1508 Enclosed Duplex Power Pump .... made of best grade open hearth steel, H construction, heavy yet carefully balanced, removable babbitt lined steel shell at crank-end, crosshead end fitted with bronze bushing, and all bushings honed to a highly polished finish. In *every* detail GASO Pumps are designed and built for easy running, long life and ease of adjustment.

GASO All-Timken-Bearing Pump Fig. 1508—with capacities ranging from 63 bbls. per hr. at 800 lbs. pressure to 250 bbls. at 250 lbs.

GASO PUMP & BURNER MFG. COMPANY
Tulsa, Okla., U. S. A.
Dallas, Texas New York, N. Y.

GASO PUMPS
for every oil industry need

SPEED!

THE side-door feature... together with the quick acting, triple-locking device, makes this the fastest, safest heavy duty elevator in the field. Can be set at any point on the casing or drill pipe by the slip setting handle, or will set positively when the collar contacts the slips. When released, the slips are loosened by means of springs, precluding any possibility of jamming or sticking.

Quickly on, quickly off, tells the story. Other exclusive features are illustrated and described in Bulletin No. 108, mailed on request.

Now made in a 7" size for handling casing or *flush joint drill pipe*, from 4¾" O. D to 7" O. D. Also made in the 10¾" size for 4¾" to 10¾" pipe or casing; and in the 13⅜" size for handling casing in sizes from 8⅝" to 13⅜"

All sizes equipped with
B J Weldless Links
YOU KNOW THEY ARE SAFE!

BJ

SIDE-DOOR SLIP ELEVATORS

BYRON JACKSON CO.

Established 1872

General Offices: 2150 East Slauson Ave., Los Angeles, Calif
Tulsa Oklahoma City Houston Shreveport New York City

Like the big Halliburton trucks, the Supervisors' cars are kept in perfect condition in Halliburton's shops—always ready to "get there somehow."

To assure adherence to the quality standards of the Halliburton Oil Well Cementing Co., a corps of Supervisors is ready, at a moment's notice, to travel to any point in the oil fields.

The duty of these Supervisors (seasoned cementing engineers, all of them) is to see to it that cementing contracts are fulfilled with skill and care; to make available to oil men the cementing knowledge gained through years of practical experience; to analyze *special problems* and suggest practical solutions.

Because eternal vigilance is the price of leadership, Halliburton guards with jealous care the reputation it has established.

HALLIBURTON
OIL WELL CEMENTING CO.
Duncan, Oklahoma

Containing information of interest to every oil man. THE CEMENTER will be sent to you free of all cost on receipt of the coupon.

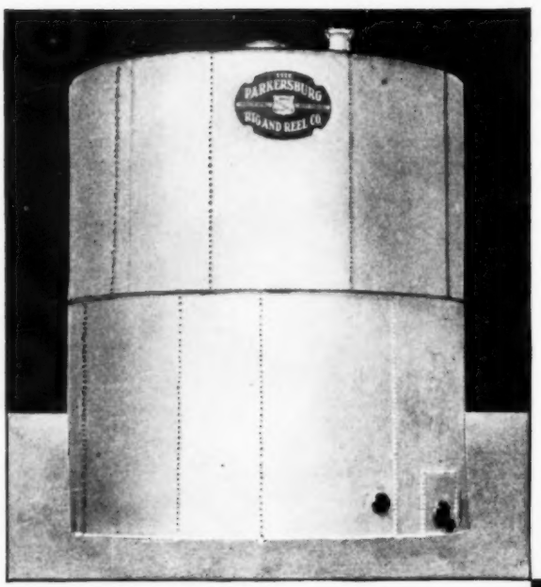
Halliburton Oil Well Cementing Co.
Dept. OW, Duncan, Okla.

Without cost or obligation, please place my name on the list to receive THE CEMENTER regularly as issued.

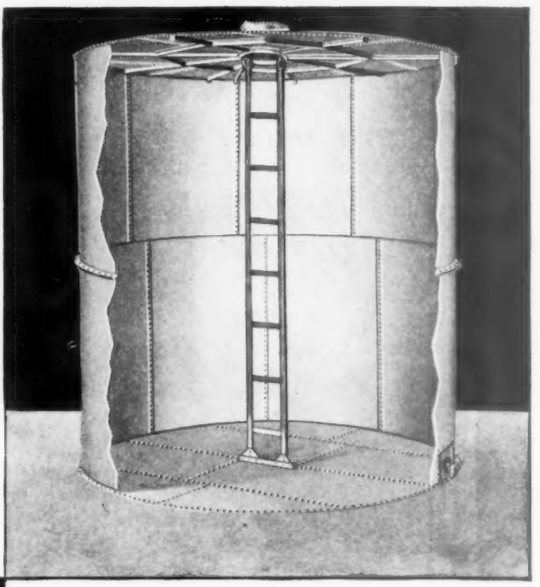
Name .....

Company .....

Address .....



Parkersburg 500 Bbl. Steel and Alcoa Aluminum Composite Tank. The Alcoa Aluminum upper ring and deck resist the severe corrosive action of hydrogen sulphide.



Interior view of same tank. Alcoa Aluminum Alloys have ample strength for this service. The bright Alcoa Aluminum decks reflect sunlight, retard evaporation.

ALCOA
ALUMINUM

Parkersburg builds Aluminum Tanks to combat corrosion and conserve the oil

Tests of these tanks, in which Alcoa Aluminum and its Alloys are used, have established these outstanding facts:

1. Alcoa Aluminum tanks are not corroded by oil or its vapors.

2. The reflectivity of aluminum has a very definite effect in retarding evaporation of oil.

Consider these facts before you buy your next tank:

1. The most destructive corrosion takes effect on the upper section and decks of tanks. In Parkersburg Composite Tanks the upper rings and decks are made of rust defying Alcoa Aluminum.

2. The use of Alcoa Aluminum in the upper rings and decks prolongs the life of the steel bottom and lower rings because it removes the principal source of sulfide scale.

3. The interior structural parts of Parkersburg Composite Tanks are made of Alcoa Aluminum; another reason why the tank as a whole will withstand the corrosive action of hydrogen sulfide.

You can take advantage of the rust-defying properties of Alcoa Aluminum in both tanks and tank cars. With Alcoa Aluminum Foil you can protect pipe lines from the effect of soil movements. On metal fences, sheds, etc., aluminum paint with its metallic pigment gives long-lasting protection from the elements. Let us send you particulars about the many forms in which Alcoa Aluminum can be used in the oil field. Address ALUMINUM COMPANY *of* AMERICA; 2419 Oliver Building, PITTSBURGH, PENNSYLVANIA.

ALCOA ALUMINUM

TAKE THE QUESTION OUT OF WIRE LINE SERVICE

USE

AMERICAN WIRE LINES

(ON THE YELLOW REELS)

"If Continental Sells It....There Is No Better"

J725

THE CONTINENTAL SUPPLY COMPANY
General Offices: ST. LOUIS

THE CONTINENTAL SUPPLY CO., LTD.
224 Traders Building, Calgary, Alberta, Canada

Export Offices: CONTINENTAL EMSCO COMPANY, INC. 74 Trinity Pl. New York

London Offices: 316-17 Dashwood House, Old Broad St., E. C. 2

CONTINENTAL EMSCO S. A. R., 7, Strada Eminescu, Ploesti, Romania

CONTINENTAL

"Yes . . . I saw that at the EXPOSITION"

Since employees in the fields, plants and offices of the petroleum industry will know so much more about practices and equipment after attendance at the 1930 International Petroleum Exposition, employers should plan to send all key men to Tulsa, Oct. 4th to 11th.

The required time and money will be profitably invested. With the knowledge, experience and inspiration they'll gain, workers will be more valuable both to their employers and to themselves.

INTERNATIONAL PETROLEUM EXPOSITION

and Congress

Tulsa Oct. 4-11
Okla. 1930

The 1930 Exposition will be the largest oil and gas show ever held. Space has been increased, new buildings added, and there will be more extensive displays and still further improved facilities for the comfort of visitors. The Scientific and Technical, Producing, Refining, Transporting and Marketing branches will be fully covered with exhibits and demonstrations.

For any information, address Wm. B. Way, Gen. Mgr., International Petroleum Exposition, Tulsa, Okla., U. S. A.

Genuine AMSCO Manganese Steel Sheaves contain more than 12% »» Manganese

AMSCO
MANGANESE
STEEL SHEAVES!
Made according to Army Ordnance Specifications (10 to 14% Manganese). *Improved* by careful methods and scientific heat treatment to give much greater life than ordinary sheaves and to lessen substantially wear on wire lines.

ALTHOUGH the first cost of genuine Amsco Manganese Steel Crown Block Sheaves is higher than that of ordinary steel sheaves, operators have found that due to their remarkably long life and substantial saving of wire rope, the investment is returned many times over.

Records of Amsco Manganese Sheaves are indeed interesting—Although many thousands are in service throughout the various fields, to our knowledge not one has been discarded due to wear. Records disclose that on sheaves that were in service for more than three years, the groove wear was so negligible that to measure it was impossible.

A. P. I. Sand Line, Casing Line and Crown Sheaves with Standard Highly polished, chrome nickel steel shafts can be furnished from stock in sizes ranging from 22″ O.D. to 36″ O.D.

LUCEY

"WHEREVER THERE'S OIL"

LUCEY PRODUCTS CORPORATION

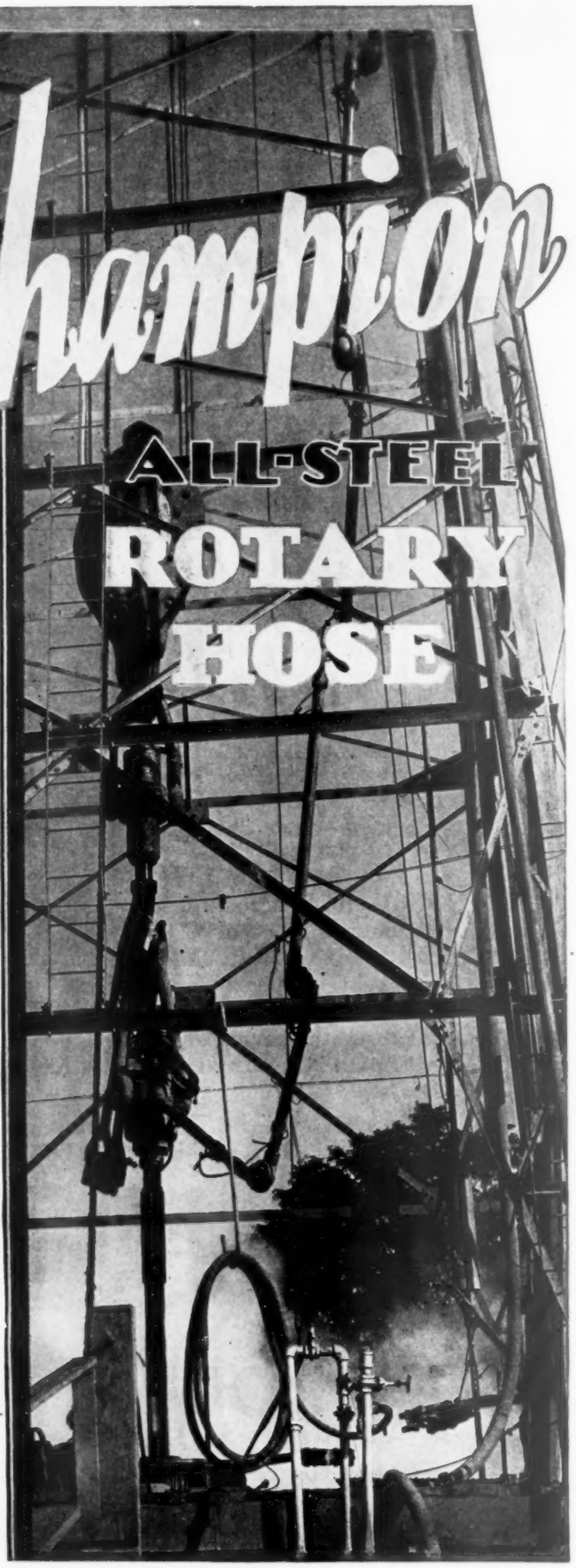
DOMESTIC HEADQUARTERS
224 EAST BRADY STREET TULSA OKLAHOMA

BRANCHES
OKLAHOMA CITY OK DUNCAN OKLA MAUD OKLA SHREVEPORT LA HOUSTON, TEXAS LOS ANGELES, CALIF.

EXPORT
3505 WOOLWORTH BUILDING NEW YORK CITY
54 OLD BROAD STREET LONDON E. C. 2, ENGLAND
55 RUE DE RIVOLI (1 ER) PARIS, FRANCE
PLOESTI, ROUMANIA
SAN FERNANDO, TRINIDAD, B. W. I.
DIAGONAL ROQUE SAENZ PEÑA NO. 501
BUENOS AIRES, ARGENTINA, S. A.

First Champion

in the opinion of experienced oil men.



CHAMPION All-Steel Rotary Hose is the pioneer, the original, all-steel hose. It was first in the field and it still is first in the hearts of the men who know—the drillers.

This continued leadership is due to just one all-important thing—performance on the job. Champion hose out-performs them all. It hangs right, works right and is right. You hang it and forget it. It's a super hose that fully meets all the conditions of modern high-pressure deep drilling.

Get the facts on rotary hose. Bulletin No. 202 gives them. A copy will be mailed gratis.

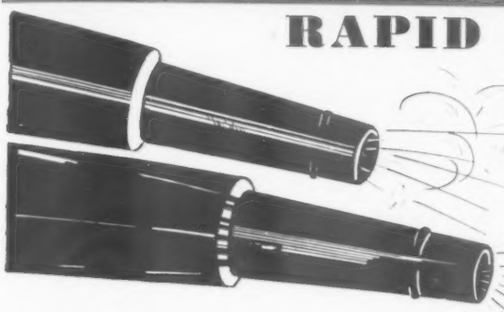
Champion hose is a form of over-insurance against hose troubles. It is as flexible and easy handling as rubber hose, weighs slightly more, yet successfully withstands pressures above 5,000 pounds. Complete information on request.

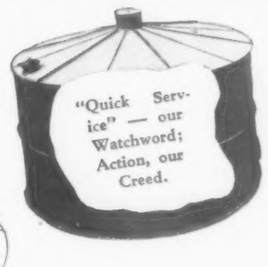
Champion & Barber
INCORPORATED

506 Subway Terminal Bldg.
LOS ANGELES, CALIF.
Telephone MUtual 2756

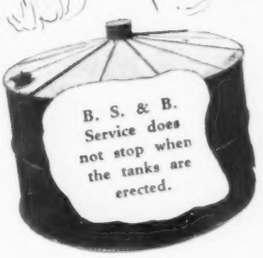
Mid-Continent Distributors: BAILEY & BECKER Co., 410 Thompson Bldg., Tulsa, Okla.
Gulf Coast Distributor: BETTIS SALES CO., 917 Merchants and Manufacturers Bldg., Houston, Texas
Export Distributor: W. S. FELLOWS, 39 Cortlandt St., New York

RAPID FIRE SERVICE





EFFICIENT B S & B SERVICE DEPENDABLE



"SERVICE ON THE DOT"
"SERVICE ON THE SPOT"

B. S. & B. are not content just to sell tanks. So thoroughly realizing the many needs of the oilmen and their demand for action, speed and completeness—B. S. & B. practices the theory that real service starts at the beginning—a good product — speed in delivery — correctness in erection—and ends only after years of actual use.

There is a Fabricating Plant located at Kansas City—ideally located for distribution to our many branches. Fifty Field Stations throughout the Mid-Continent and Rocky Mountain Oil Fields with complete stocks in each, allow immediate delivery. B. S. & B. have their own crews of trained tank erectors,—there is no scouting for labor nor dependence on inexperience when *your* tanks are to be erected. And B. S. & B. service does not stop with the erection of the tanks. Our men are always nearby to be of any service that may be desired or required—also to inspect the tanks at regular intervals.

B.S.&B. Perfection

Vapor Pressure

Our Watchword QUICK SERVICE

TANKS

These tanks are *Tight* — VAPOR PRESSURE! Also leakproof, of course! Built of copper bearing steel of flange type construction with four thicknesses of metal, plus B. S. & B. Special packing, at the seams. They are built in sections for portability and easy replacement.

Each tank is a "Watch Dog" of your crude, equipped with the B. S. & B. Thief Hole Pressure Vacuum Valve, which automatically operates at 16 ounces pressure (the maximum caused by sun rays on ordinary quiet crude) and 2 ounces vacuum, preventing evaporation loss, and retaining the valuable light fractions,—and meanwhile protecting your tank against bulging or collapsing from excessive pressure or vacuum. B. S. & B. Vapor Pressure Tanks are made in steel for sweet crude and wood for sour crude.

We also manufacture A.P.I. tanks. B. S. & B. A.P.I. Bolted Steel Tanks conform to A.P.I. dimensional standards and to the exacting standards of B. S. & B. manufacture, and carry the official A.P.I. monogram.

We want to SERVE you—may we have our representative call to tell you more about the renowned B. S. & B. service and B. S. & B. family of tanks? Or may be send literature? Address Dept. A-32.

Black Sivalls & Bryson INC.

BARTLESVILLE - OKLAHOMA

Pipe

that meets the most exacting service requirements

WHATEVER the requirements—ductility, strength, uniformity, straightness—Bethlehem Steel Pipe will meet them satisfactorily. Its strong, tight welds and uniform, easily-worked steel contribute to the high regard in which Bethlehem Pipe is held by men who use it.

Bethlehem Pipe is made of specially selected steel, under expert metallurgical supervision. Careful workmanship and the use of high-grade material are important factors in its high quality. Each step in its manufacture, from the mining of the ore, through the finishing operations, is controlled by one organization.

Whatever the nature of the job you can place implicit confidence in Bethlehem Steel Pipe. It meets the most exacting requirements.

Bethlehem maintains at Houston, Texas, and Wilmington, Calif., well assorted stocks of line pipe, ready for immediate shipment. Both threaded and coupled and plain-end pipe are included in these stocks.

BETHLEHEM STEEL COMPANY

General Offices: Bethlehem, Pa.

District Offices: New York, Boston, Philadelphia, Baltimore, Washington, Atlanta, Pittsburgh, Buffalo, Cleveland, Cincinnati, Detroit, Chicago, St Louis

Pacific Coast Distributor: Pacific Coast Steel Corporation, San Francisco, Los Angeles, Portland, Seattle, Honolulu

Export Distributor: Bethlehem Steel Export Corporation, 25 Broadway, New York City

BETHLEHEM STEEL PIPE

TITANIZED *bits* *are hard as a* DIAMOND!

BY the modern miracle of TITAN METAL, ordinary drilling bits become the hardest, most penetrating, and wear-resisting metal known . . . in a figurative sense, "AS HARD AS A DIAMOND POINT!"

TITAN hard facing increases the drilling efficiency of any bit from 100% to 1000% . . . at negligible cost.

Spectacular records of speed, economy and endurance have been made by hundreds of operators with TITANIZED bits. Many report doing 1000 feet or more without changing.

Write for these amazing performance records, and the full facts about this remarkable boon to drillers.

TITAN METAL is easily and quickly applied. Only one application is necessary. It bonds perfectly with parent metal, and is adaptable to every type of bit. Will not crumble nor break away. Bit can be heat-treated in any desired manner after compound is applied. TITAN METAL makes any bit drill more hole in any formation, and drill true to gauge.
Produced in graded sizes for inserts, and in granular form, packed in handy tubes.

The manufacture of Titan Metal is fully covered by patents. Infringements will be prosecuted.

MILLS ALLOYS, INC.

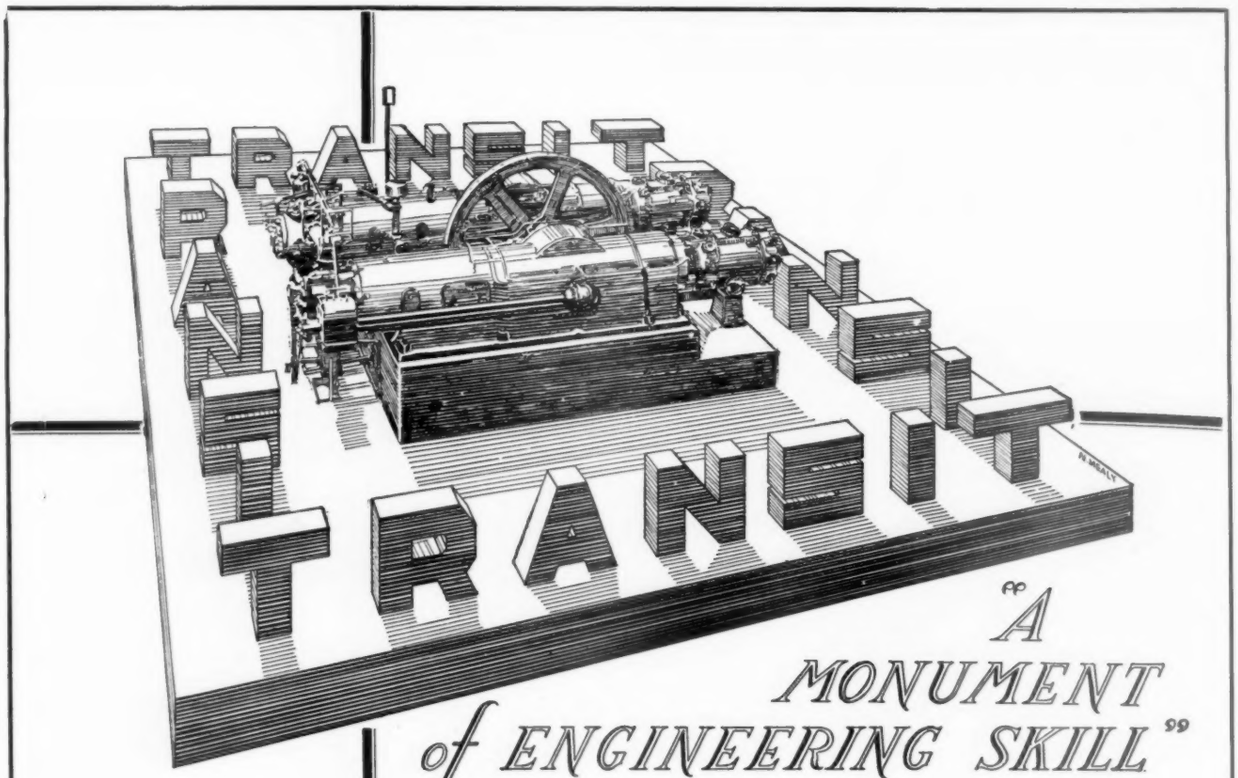
3202 So. San Pedro Street

Los Angeles, California, U.S.A.

TITAN

and

TUBE TITAN **METAL**



"A MONUMENT of ENGINEERING SKILL"

An appreciative remark by an official high in the gas industry.

While visiting our shops recently, he looked this engine over pretty carefully.

Another encomium we can add to the already long list.

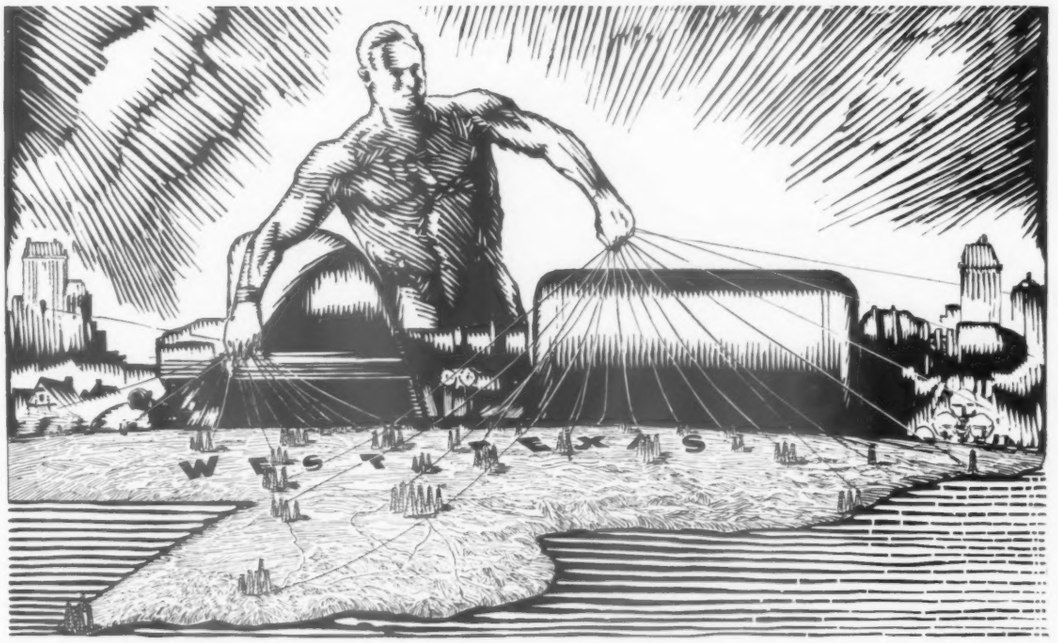
Bulletin 410-B yours any time

Agents
FRICK-REID SUPPLY CORPORATION
Tulsa, Okla., or any store.
REPUBLIC SUPPLY COMPANY
of California
Los Angeles, California
E. L. WILSON HARDWARE CO.
Beaumont, Texas

NATIONAL TRANSIT
Pump & Machine Co.
Oil City, Pa.

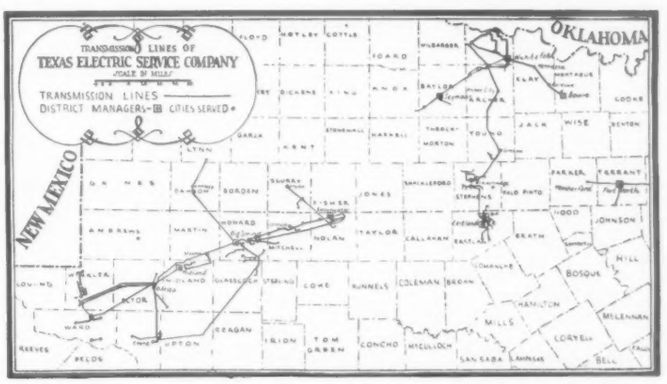
DISTRICT OFFICES
NEW YORK PHILADELPHIA PITTSBURGH
CLEVELAND HOUSTON TULSA LOS ANGELES

Agents
F. C. RICHMOND MACHINERY CO.
Salt Lake City, Utah.
REEVES & SKINNER MACHINERY CO.
St. Louis, Mo.



ELECTRIC POWER FOR OIL WELL PUMPING

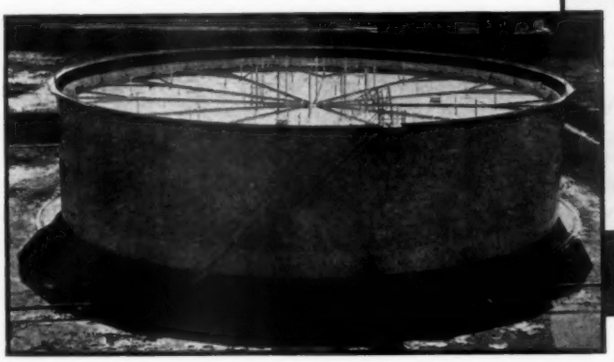
Every day new developments in electric oil well pumping are arousing more and more interest among oil field operators. The savings in labor and maintenance expenditures, coupled with increased production and less operating difficulties, make it imperative that the producer investigate the possibilities of pumping his oil electrically. Throughout our service area skilled engineers are ready and willing to explain the advantages of electric oil well pumping. Inquiry at any of our district offices will assure instant and helpful information about your power matters.

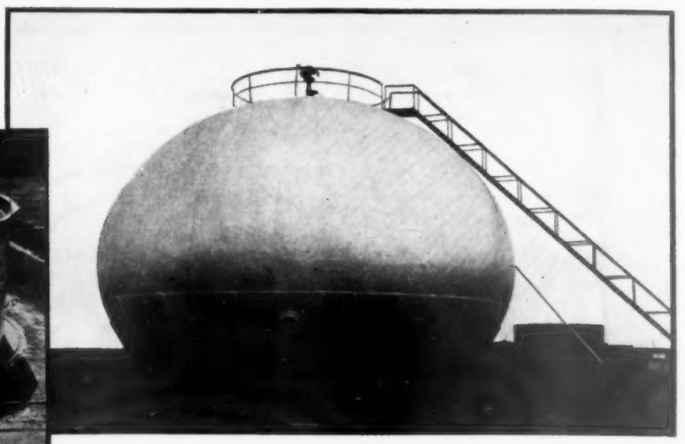


TEXAS ELECTRIC SERVICE COMPANY

GENERAL OFFICES
FORT WORTH

Below: Oil storage tank equipped with Wiggins Floating Roof, 114 ft. 7 in. in diameter. Right: A 10,000-barrel Hortonspheroid at Electra, Texas.





"..tanks and towers and condenser boxes—and Hortonspheres and roofs"

(with appropriate apologies)

For one oil company alone we have furnished the following range of products:

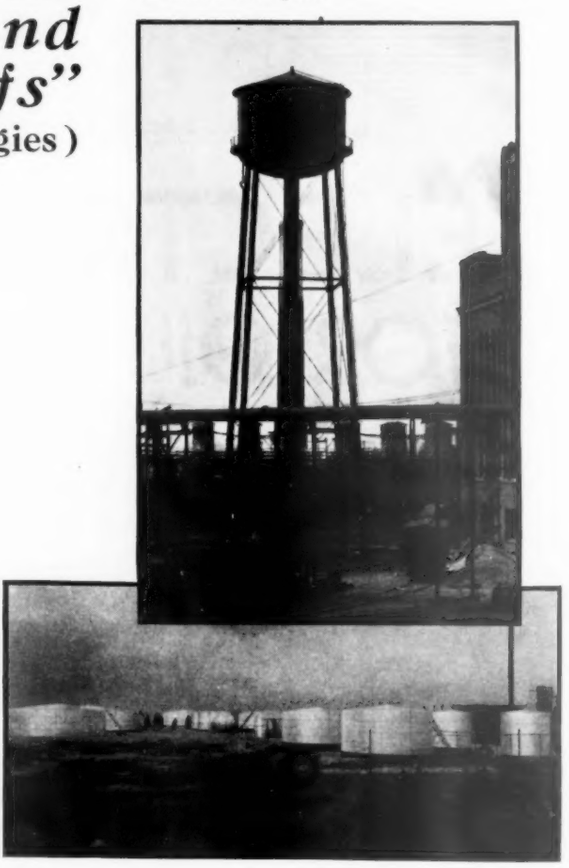
Wiggins Floating Roofs	*Tanks (field storage)*
Wiggins Breather Roofs	*Tanks (asphalt storage)*
Wiggins Pontoon Roofs	*Tanks (acid oil)*
Hortonspheres (for gas)	*Tanks (fuel oil)*
Elevated Water Tanks	*Tanks (cylindrical)*
Caustic Melting Tanks	*Tanks (settling)*
Smokestacks	*Condenser Boxes*
Blowdown Drums	*Bubble Towers*
Steel Barges	*Water Separators*

Leading companies in all departments of the oil industry buy many of these products regularly from this one source. Such diversification means that you can fill all your plate-work requirements from one source with resulting saving in time and money. Our extensive fabrication facilities permit us to ship from Chicago, Ill.; Greenville, Pa.; Birmingham, Ala., or Bridgeburg, Ont.

In the tank division alone, we furnish Horton field erected tanks in all capacities from 500 bbls. up—to our standard designs, A. P. I. specifications, or to customers' special designs. We have our own erection crews. These tanks may be equipped with cone roofs or with Wiggins Roofs for stopping evaporation and fire loss. Cylindrical tanks are supplied from the Birmingham and Bridgeburg plants. Horton elevated tanks supply dependable water service to refineries, oil field towns, pipe line stations, etc.

Our nearest office will be glad to supply complete information and estimates on any work you may have in mind.

Below: This refinery uses a Horton ellipsoidal bottom elevated water tank. The capacity is 100,000 gallons and the height to bottom 100 feet.



Group of Horton storage tanks, equipped with cone roofs.

CHICAGO BRIDGE & IRON WORKS

Dallas .....3338 Magnolia Bldg.	Chicago .....2142 Old Colony Bldg.	Philadelphia .....1613 Jefferson Bldg.
Birmingham .....1538 Fiftieth St., N.	Detroit .....1515 Lafayette Bldg.	Boston .....1518 Consolidated Gas Bldg.
Atlanta .....2155 Rhodes-Haverty Bldg.	Cleveland .....2241 Union Trust Bldg.	San Francisco .....1050 Rialto Bldg.
Houston .....1120 Electric Bldg.	New York.....3144 Hudson Terminal Bldg.	Havana, Cuba.....Apartado 2507

HORTON TANKS

OW8-29 Gray

You Can Get J & L Pipe Quick

throughout This Vast Territory

When you need seamless or welded steel pipe quick—in an emergency—think of J & L. Every red dot on the map represents a J & L pipe stock adequate to supply emergency demands in the immediate vicinity. These stocks are carried in the yards of J & L pipe distributors, the Frick-Reid Supply Corporation, the Jarecki Manufacturing Company and the Norvell-Wilder Supply Company.

JONES & LAUGHLIN STEEL CORPORATION

AMERICAN IRON AND STEEL WORKS

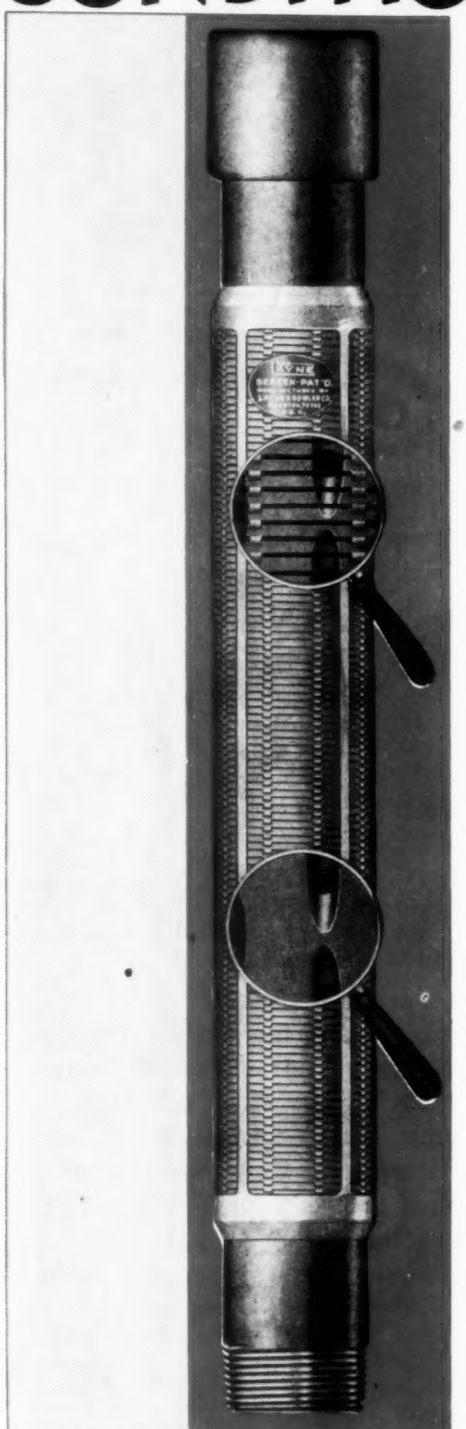
J&L STEEL

Manufacturers of Seamless and Welded Casing, Tubing, Drill Pipe and Line Pipe, and Welded Steam, Gas and Water Pipe in both Black and Galvanized.

Also makers of Bars, Shapes and Plates, Reinforcing Bars, Cold Finished Steel, Junior Beams, Steel Piling, Fabricated Structural Work, Steel Barges, Wire Products and Tin Mill Products.

JONES & LAUGHLIN BUILDING, PITTSBURGH, PENNSYLVANIA

A STUDY OF SCREENING CONDITIONS *for more than* 1/4 CENTURY *Produced*



THE LAYNE

MILLED GROOVE SCREEN

This "greater production" *Milled Groove Screen,* the culmination of more than a quarter century's experience in building screens, is oil industry's most important invention.

The *Layne Milled Groove Screen* increases *production* from 33-1/3% to 100%, it has the ability to safely stand 8,000 feet of drill pipe, does not clog with mud and sand, is a tonic to low pressure wells, and avoids sand cutting.

Install the *Layne Milled Groove Screen* instead of wishing you had.

Write, wire or phone for quick service, prices, or catalogue.

The Layne & Bowler Co.

Houston Texas

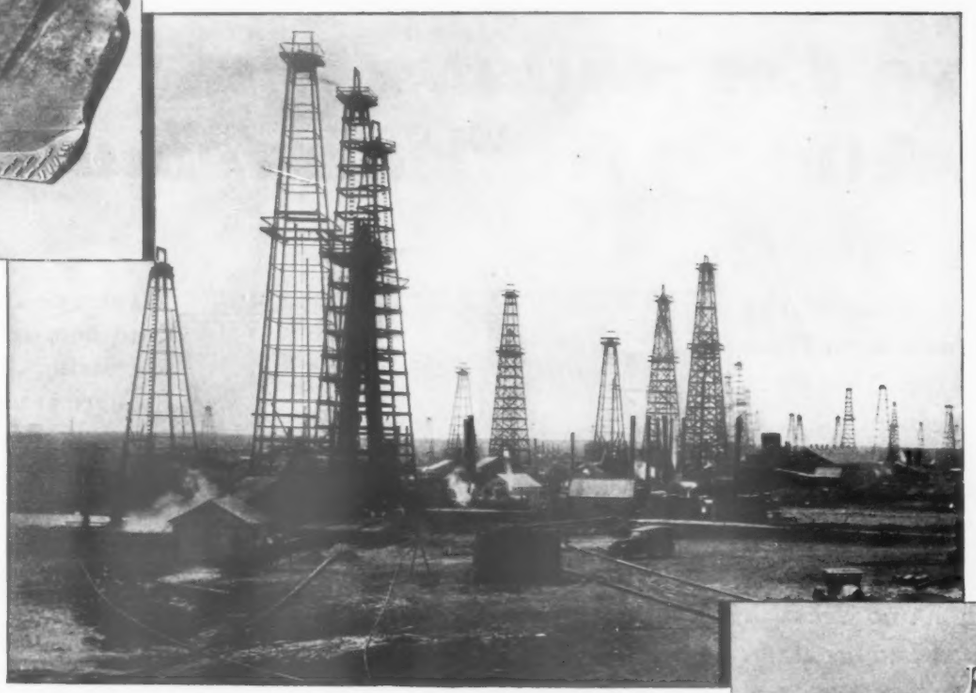
Install Milled Groove Instead of Wishing You Had

The Layne New York Co., 30 Church St., New York

The Layne & Bowler Corp., Los Angeles, Calif.

Vickers, Limited London, England

A QUARTER CENTURY OF EXPERIENCE AND DEVELOPMENT



OVER 100 FEET MORE FOOTAGE IN LESS TIME

• • with tools hard set with HAYSTELLITE

THE above figures are from the report of an operator in the Spindle Top field of Texas. As a test this operator ran tools hard set with Haystellite and hard faced with Haynes Stellite, alternating with tools set with another diamond substitute and another type of hard facing material. The actual figures follow:

	Footage	*Time Required*
Haystellite and Haynes Stellite	390 feet	36 hours or 10.83 feet per hour
Other Diamond Substitute and Other Hard Facing	279 feet	40 hours or 5.75 feet per hour

The records made by tools hard set with Haystellite are constantly being confirmed and duplicated in all the large oil fields throughout the world. In point of higher efficiency and all around economy, investigate Haystellite. Write for our new book, "Haynes Stellite Products in the Oil Fields." Fill out and return the coupon today.

HAYNES STELLITE COMPANY

Unit of Union Carbide UCC *and Carbon Corporation*

CHICAGO DETROIT LOS ANGELES SAN FRANCISCO
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General Offices and Works — Kokomo, Indiana

Haynes Stellite Welding Rod is also available from any of the 42 shipping points of the Oxweld Acetylene Company

HAYNES STELLITE · HAYSTELLITE · HASCROME · HASTELLOY

Quality Products, Fair Prices, Dependable Supply, Engineering Service

HAYSTELLITE TRADE MARK

HAYNES STELLITE TRADE MARK

Haynes Stellite Company, Kokomo, Ind.

Without obligation on my part, please send me your new book, "Haynes Stellite Products in the Oil Fields."

Name .....

Company ..... Position .....

Street Address .....

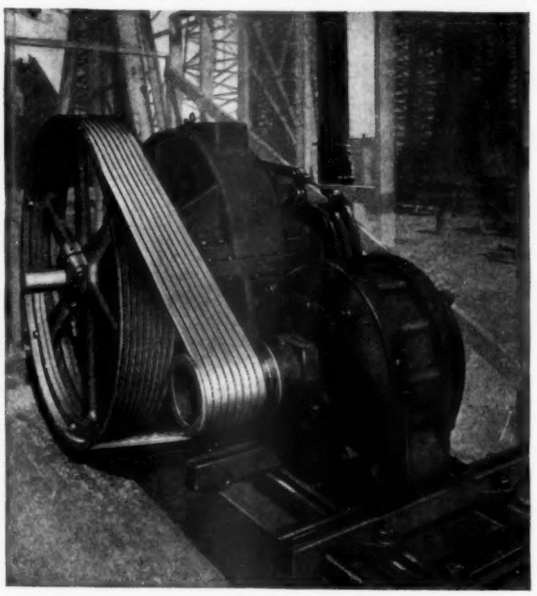
City ..... State .....

O.W. 8-30

TEXROPE DRIVES
Give *Continuous* Service with Almost No *Maintenance*

EVERYWHERE the trend is toward Texrope Drive. This short center transmission is always silent. It is clean, yet unaffected by dirt or moisture. Starting and acceleration are smooth . . . no jerks . . . no slip . . . no backlash.

Vibration is absorbed by the Texropes. The motor is protected from shocks. Bearing trouble due to the drive disappears. Continuous operation is assured. Costly shut-downs become a thing of the past.



The Allis-Chalmers Monarch Double Reduction Unit for Oil Fields uses a Texrope Drive as the first reduction. The size of the Texrope sheave may be changed to give any desired speed ratio.

Texrope Drives require no belt dressing . . . no greasing . . . no oiling. There is no wear on the grooved sheaves and almost none on the rubberized-cord belts. Maintenance cost is reduced to a minimum. The belts are unusually long lived. Correct tension is easily maintained. Adjustments are seldom necessary.

Put Texrope Drives on the machines that give you the most trouble in your plant. Let the superior performance of Texrope prove its economy to you.

Over 75,000 Texrope Drives Giving Satisfactory Service

The Texrope Drive, originated by Allis-Chalmers, has proven to be "The Perfect Transmission." Insist on getting Texrope. Today over 75,000 Texrope Drives are in satisfactory service, in practically every industry, transmitting power up to 2,000 H. P. per single drive.

Texrope belts and grooved sheaves up to 100 H. P. and in ratios up to 7:1 are carried in stock at points that permit prompt shipment to all parts of the country. Let us show you how Texrope Drives will end your transmission troubles and help you cut costs. Write for a copy of Bulletin 1228-K.

ALLIS-CHALMERS MANUFACTURING COMPANY, (*Texrope Division*)
Specialists in Power Machinery Since 1846 Milwaukee, Wisconsin

ALLIS-CHALMERS
TEXROPE DRIVES

THE PERFECT TRANSMISSION — ALLIS CHALMERS TEXROPE DRIVE — FOR EVERY PURPOSE

Ask For Alten Products

The very next time you need something good to help you in production of oil — remember to ask your supply house for Alten's. There are more than a hundred items in this quality line . . . any one of which will tell you all you wish to know about dependability when you put it to work. Bear down on them as hard as you like . . . they'll stand the gaff! For forty years we have watched these products in actual operation in the oil fields and we have been constantly producing modern improved equipment to meet these rigid demands. It will pay you to know this quality line of dependable products.

Ask Your Supply House

ALTEN'S
Foundry & Machine Works

Established in 1889 at LANCASTER, OHIO

View of Indicating Gauge—Always Visible to the Driller

6 reasons *for using the* MARTIN DECKER AUTOMATIC RECORDING MUD SCALES

1. It enables the crews to keep the mud uniform and up to a certain standard.
2. It makes it possible for those in charge of the drilling operation to specify the kind of mud desired. Mud that weighs so much per pound is a simple but definite description.
3. It eliminates the danger of hole caving for reason of the mud becoming too light to hold back the formation.
4. It reduces the liklihood of blowouts in gassy formation.
5. It makes it impossible for reckless or unfair drillers to thin the mud up too much and get hole regardless of after consequences.
6. It speeds up drilling by making it easy to keep the "ideal" mud.

Send for Descriptive Folder!

Martin-Decker Corp.

Formerly
Martin-Loomis Corp.,
3431 Cherry Ave.,
Long Beach, California

WEIGHT RECORDING, MEASUREMENT AND CONTROL

9 REASONS WHY

YOU WILL PROFIT BY USING

NEW BEDFORD
"NONE BETTER"
PURE MANILA

CAT LINES

1. Made of high quality Pure Manila Fibre.
2. Specially laid and constructed for catline use.
3. Each End whipped; will not fray out and unstrand.
4. Each line individually rolled and burlapped at mill.
5. Made water resisting for all weather service.
6. Careful inspection, insuring uniform quality.
7. Nearly a century of rope making experience back of each coil.
8. Material and workmanship guaranteed.
9. Cost no more than ordinary lines.

"If Continental Sells It.... There Is No Better"

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General Offices: ST. LOUIS

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224 Traders Building, Calgary, Alberta, Canada

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CONTINENTAL EMSCO COMPANY, INC.
74 Trinity Place, New York
London Offices: 316-17 Dashwood House, Old Broad St., E.C. 2

CONTINENTAL EMSCO S. A. R.
7, Strada Eminescu, Ploesti, Romania

CONTINENTAL

"What's in the blood...."

It simply isn't in the blood of the Frick-Reid organization to handle anything but Quality Products. The appended list of manufacturers we represent stands in eloquent testimony to that fact, aggregating endless experience, unlimited assets, irrefutable integrity. A policy long pursued is like the early environment and training of a child. Quality Products Only will be the Frick-Reid policy always.

FRICK REID SUPPLY CORPORATION

Pittsburgh, Pa.,

AXELSON MANUFACTURING COMPANY, Ltd.
Sucker Rods, Pull Rods, Plunger Working Barrels (Pumps), Stuffing Boxes, etc.

BEAUMONT IRON WORKS COMPANY
Dreadnaught Rotary Equipment. Water-cooled Drawworks, Timken Bearing equipped Straight Line Crown, Traveling and Tubing Blocks; Pumping Hoists, Electrically Driven Bailing Line Reels, Structural Steel Walking Beams with patented Internal Truss Brace; Casing Shoes, Clamps, etc.

DONOVAN BOILER WORKS
Oil Country Boilers and Tanks. Boilers range from low pressure to 350 lbs. W.P. for the deepest and hardest drilling demands.

Tulsa, Okla.,

FRICK-REID SERVICE BELTING
Friction Surface Rubber Belting made to our own specifications.

JONES & LAUGHLIN STEEL CORPORATION
Tubular goods including Buttwelded, Lap-welded and DOUBLE PIERCED Seamless Steel in Line Pipe, Tubing, Drill Pipe and Casing.

NATIONAL TRANSIT PUMP & MACHINE COMPANY
Pumps, Gas Engine Compressors, Pipe Line Equipment, etc.

WILLIAM POWELL COMPANY
Valves for the Petroleum Industry

J. P. RATIGAN
The "SURE GRIP" line of pumping equipment including Grips, Clamps, Beam Hangers, etc.

and Branches

JOSEPH REID GAS ENGINE COMPANY
Gas Engines, two and four-cycle, Band Wheel and Direct Drive Pumping Powers, Receiving Boxes and other refinery equipment.

JOHN A. ROEBLING'S SONS COMPANY
Wire Line, Gas and Electric Welding Wire.

ROSSENDALE-RUBOIL COMPANY
"Camel Hair" and stitched canvas belting.

WALWORTH COMPANY
Fittings, Valves and Tools for Steam, Water, Gas, Oil and Air.

WHITLOCK CORDAGE COMPANY
Manila Cordage. Drilling Cables, Bull Ropes, Cat Lines, etc. Either Waterflex or plain. Waterflex cordage is impervious to moisture.

The Right Combination
for Economical Drilling

PARKERSBURG'S Combination Portable Drilling Machine combines the advantages of steel for strength and rigidity with the features of wood where flexibility is required. The rigid All-Steel Frame is made from structural shapes, riveted and welded. Steel Walking Beam and Steel Wheels all contribute to permanence and freedom from replacements.

In addition to this ideal combination of materials and quality construction, the machine is portable, readily transported by team or tractor, and when on the location it is quickly demounted, set on the usual foundation timbers and keyed to the sills to operate as a Standard Rig.

It moves on wheels, operates on sills, combining efficiency and economy. Due to this feature the Parkersburg Combination eliminates much of the vibration common to machines operating on wheels. It permits faster and deeper drilling and all-around superior performance.

The 4½-Inch Combination Machine, recommended for drilling to 2500 feet, can be used with 66-Foot "A" Type or Three-Piece mast.

Practical simplicity and fewer parts are added advantages, resulting from Parkersburg's thirty-three years of experience which make this machine "the Right Combination" for profitable drilling.

Complete details and prices gladly furnished from our Main Office, or ask any Parkersburg Representative.

The Strength of Steel
The Flexibility of Wood

Engineered by
PARKERSBURG

THE PARKERSBURG RIG AND REEL CO.
TRADE MARK REG.

Moves on Wheels
Works on Sills

PARKERSBURG PRODUCTS

Portable Drilling Machines (Wood and Combination-Steel)
Steel Wheels (Bull, Band and Calf)
Rig Irons
Steel Derricks and Crown Blocks
Chain-Driven Sand Reels and Bailing Reels
All-Steel Standard Rigs
Bolted Steel and Aluminum Tanks
Miscellaneous Drilling Equipment
Steel Walking Beams and Pitmans

We subscribe to A.P.I. Standards

THE PARKERSBURG RIG AND REEL COMPANY

Main Offices and Works
PARKERSBURG, WEST VIRGINIA
NEW YORK - TULSA - FT. WORTH - HOUSTON
Branches In All Active Fields

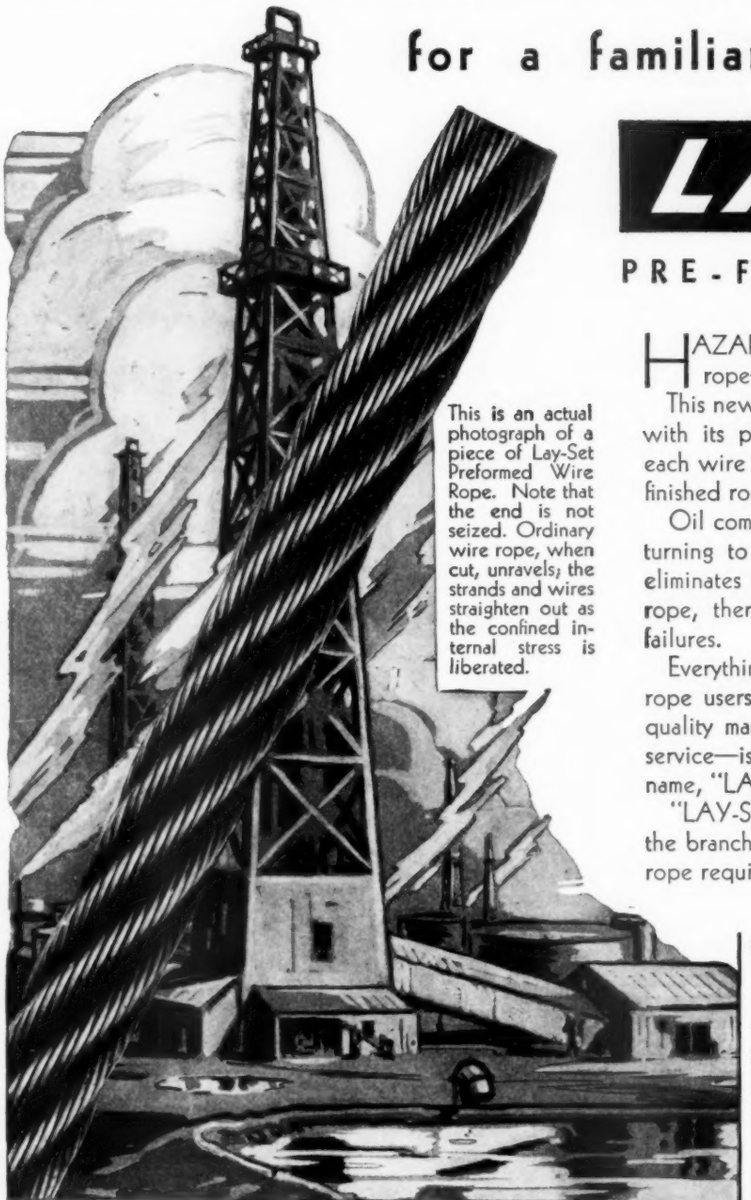
149-A

A NEW NAME

for a familiar HAZARD Rope

LAY-SET

PRE-FORMED WIRE ROPE



This is an actual photograph of a piece of Lay-Set Preformed Wire Rope. Note that the end is not seized. Ordinary wire rope, when cut, unravels; the strands and wires straighten out as the confined internal stress is liberated.

HAZARD announces a significant new name in wire rope—"Lay-Set"—(formerly Flex-Set).

This new name more readily associates this familiar rope with its preformed construction—for preforming "sets" each wire and strand to the exact shape it assumes in the finished rope.

Oil companies and drilling contractors everywhere are turning to preformed rope because preforming entirely eliminates the internal stresses inherent in ordinary wire rope, thereby removing the cause of most early rope failures.

Everything that the name HAZARD has meant to wire rope users for over eighty years—advanced design, first quality materials and craftsmanship, and long dependable service—is exemplified in this familiar rope with the new name, "LAY-SET", preformed by Hazard.

"LAY-SET" Preformed Wire Rope is carried in stock by the branches and dealers listed. Specify it for your next rope requirement.

Outstanding advantages of LAY-SET

1. No internal stresses.
2. Handles readily. Not "cranky".
3. Installed in less time.
4. Equal load on all strands.
5. Less wear on drums and sheaves.
6. LONGER LIFE.

HAZARD WIRE ROPE COMPANY

WILKES-BARRE PENNSYLVANIA

511 Petroleum Bldg., FORT WORTH, TEXAS

New York Pittsburgh Chicago Denver Los Angeles San Francisco Birmingham

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904 Mid-Continent Bldg., Tulsa, Okla.

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HOUSTON OIL FIELD MATERIAL CO., Inc.
Houston, Refugio, Seguin, Texas.

LONGHART SUPPLY CO.
619 Petroleum Bldg., Fort Worth, Texas

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MID-CONTINENT SUPPLY CO.
Fort Worth, Odessa, Texas.

MOUNTAIN IRON & SUPPLY CO.
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PRICHARD SUPPLY CO.
Mannington, W. Va.

PRODUCERS SUPPLY & TOOL CO.
Marietta, Ohio, St. Mary's, W. Va., Fort Worth, Olney, Graham, Coleman, Texas, Bristow, Oklahoma

UNION PIPE & SUPPLY CO.
Bradford, Pa.

BRINGING DOWN *the* COST *of* . . . . . .

CUTTING OUT STUCK DRILL PIPE

By having an improved type of cutter that will make 8 to 10 more cuts per set and by being able to remove greater lengths of drill pipe at each cut you greatly reduce the time consumed in completing the job and the expense entailed when numerous trips in and out are necessary. This very obvious saving is but one of the many exclusive features of this new tool.

With the new Outside (drill pipe) Cutting Tool it is possible to cut and remove at one trip as much pipe as it is practical to wash over. The cutters are fed slowly and smoothly into the cut by a patented screw feed that absolutely prevents gouging or sticking. When cut is completed the cutters are returned by the screw feed to their original position of flush with the inside of the cutter body. There is nothing to become stuck or lodged while going in or out of the hole.

This tool is designed to prevent any upward strain on the cutters while cut is being made.

When you have a cutting job call Abercrombie. We will send an experienced operator with full equipment to perform any job. These services are available on an economical contract basis.

For RED BALL, *Inside or Outside Cutting Service Call:*

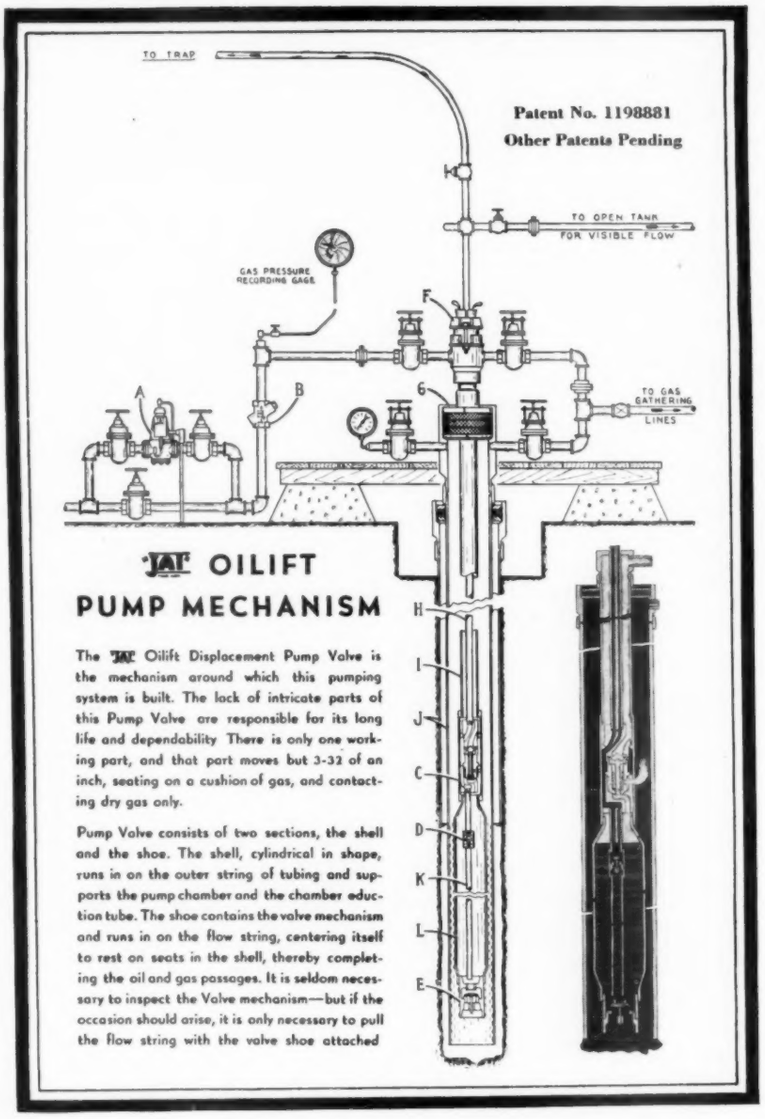
HOME OFFICE	Fairfax 5317
Long Distance 200	
Arch Owen	Lehigh 7586
H. C. Fouts	Lehigh 8445
C. M. and R. H. Abercrombie	Lehigh 6902
J. S. Abercrombie	Lehigh 7459
LAKE CHARLES, LOUISIANA	
Ford de Cordova	Phone 584

J.S. ABERCROMBIE
OUTSIDE DRILL PIPE CUTTING TOOL

J. S. Abercrombie Co.
RED BALL CUTTING SERVICE
21ST FLOOR GULF BLDG.
HOUSTON – TEXAS

J.S.A.-5

"JAT" PUMPING SYSTEM



"JAT" OILIFT PUMP MECHANISM

The "JAT" Oilift Displacement Pump Valve is the mechanism around which this pumping system is built. The lack of intricate parts of this Pump Valve are responsible for its long life and dependability There is only one working part, and that part moves but 3-32 of an inch, seating on a cushion of gas, and contacting dry gas only.

Pump Valve consists of two sections, the shell and the shoe. The shell, cylindrical in shape, runs in on the outer string of tubing and supports the pump chamber and the chamber eduction tube. The shoe contains the valve mechanism and runs in on the flow string, centering itself to rest on seats in the shell, thereby completing the oil and gas passages. It is seldom necessary to inspect the Valve mechanism—but if the occasion should arise, it is only necessary to pull the flow string with the valve shoe attached

ADVANTAGES

Will pump wells of any depth—crooked or straight.

Low lifting cost.

Increased production—due to continuous operation.

Not effected by sand.

Additional gasoline recovery from recycled gas.

Eliminates frequent pulling of wells.

Can pull vacuum or hold pressure on formation when the need arises.

Permanence of compressor plants assured.

Sucker rods and standard pumping equipment eliminated.

No wear on tubing or casing.

Descriptive Bulletin

No. 90

Sent on Request

THE NATIONAL SUPPLY COMPANIES

WHY WORRY ?

You can forget your pipe worries and speed up your jobs—if your pipe and casing come to you equipped with Colona Protectors.

These big, husky, heavy gauge protectors cover the ends as well as the threads—bumps and bangs—grease and sand—cannot injure the pipe—it reaches you in the same identical condition it left the mill.

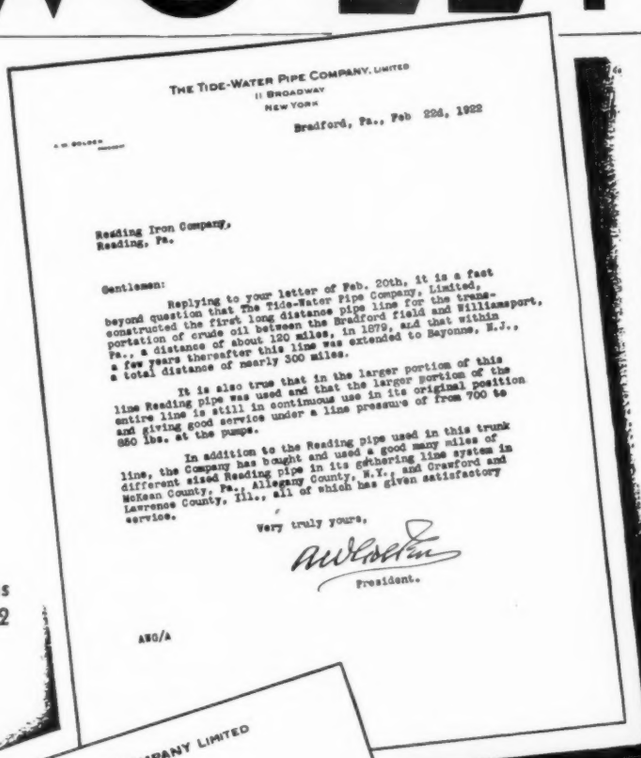
All you have to do—is to specify "Colona Protectors." Why not do it?

Pittsburgh Screw & Bolt Corporation
Colona Division « » Pittsburgh, Penna.

Demand COLONA

PIPE THREAD PROTECTORS

TWO LETTERS



THE TIDE-WATER PIPE COMPANY, LIMITED
11 BROADWAY
NEW YORK

Bradford, Pa., Feb 22d, 1922

Reading Iron Company,
Reading, Pa.

Gentlemen:

Replying to your letter of Feb. 20th, it is a fact beyond question that The Tide-Water Pipe Company, Limited, constructed the first long distance pipe line for the transportation of crude oil between the Bradford field and Williamsport, Pa., a distance of about 120 miles, in 1879, and that within a few years thereafter this line was extended to Bayonne, N.J., a total distance of nearly 300 miles.

It is also true that in the larger portion of this line Reading pipe was used and that the larger portion of the entire line is still in continuous use in its original position and giving good service under a line pressure of from 700 to 860 lbs. at the pumps.

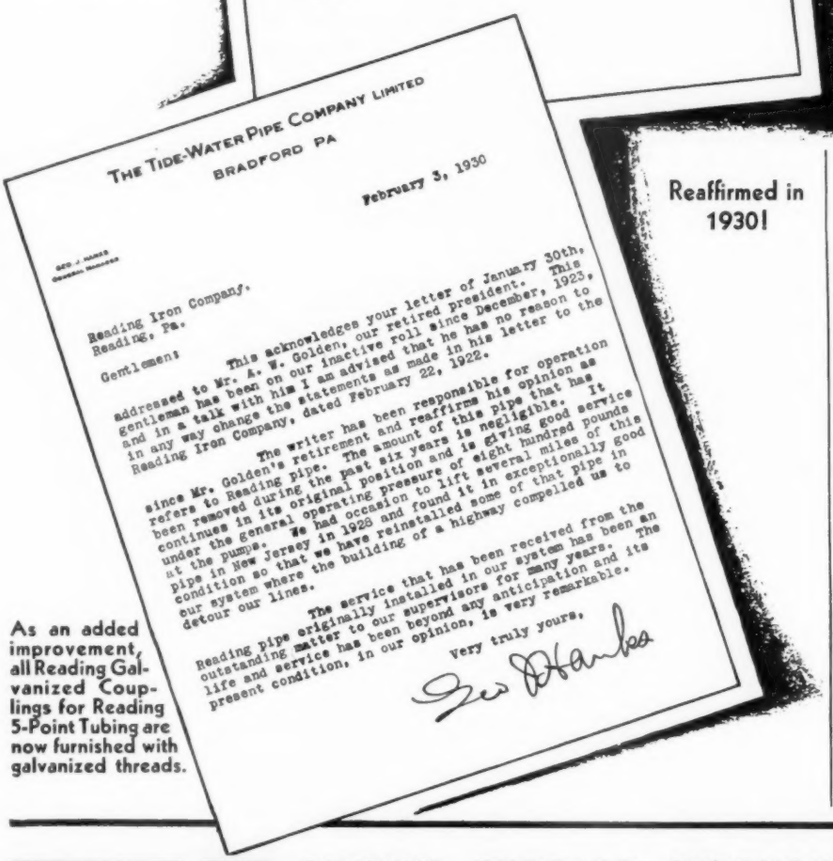
In addition to the Reading pipe used in this trunk line, the Company has bought and used a good many miles of different sized Reading pipe in its gathering line system in McKean County, Pa., Allegany County, N.Y., and Crawford and Lawrence County, Ill., all of which has given satisfactory service.

Very truly yours,

President.

ASG/A

This letter was written in 1922



THE TIDE-WATER PIPE COMPANY LIMITED
BRADFORD PA

February 3, 1930

Reading Iron Company,
Reading, Pa.

Gentlemen:

This acknowledges your letter of January 30th, addressed to Mr. A. W. Golden, our retired president. This gentleman has been on our inactive roll since December, 1923, and in a talk with him I am advised that he has no reason to in any way change the statements as made in his letter to the Reading Iron Company, dated February 22, 1922.

The writer has been responsible for operation since Mr. Golden's retirement and reaffirms his opinion as refers to Reading pipe. The amount of this pipe that has been removed during the past six years is negligible. It continues in its original position and is giving good service under the general operating pressure of eight hundred pounds at the pumps. We had occasion to lift several miles of this pipe in New Jersey in 1928 and found it in exceptionally good condition so that we have reinstalled some of that pipe in our system where the building of a highway compelled us to detour our lines.

The service that has been received from the Reading pipe originally installed in our system has been an outstanding matter to our supervisors for many years. The life and service has been beyond any anticipation and its present condition, in our opinion, is very remarkable.

Very truly yours,

Reaffirmed in 1930!

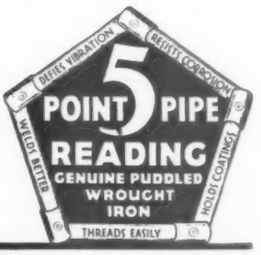
As an added improvement, all Reading Galvanized Couplings for Reading 5-Point Tubing are now furnished with galvanized threads.

THE letters reproduced here speak for themselves. They show why Reading 5-Point Pipe—Genuine Puddled Wrought Iron—is preferred in the oil country. Remember, Reading 5-Point Pipe is double welded for extra strength. The Reading name and indented spiral mark identify every length of this rust-resisting, strain-defying pipe.

READING IRON COMPANY
Reading, Pennsylvania

Atlanta • Baltimore • Cleveland • New York
Philadelphia • Boston • Cincinnati • St. Louis
Chicago • New Orleans • Buffalo • Houston
Tulsa • Seattle • San Francisco • Los Angeles
Detroit • Pittsburgh • Kansas City

Reading pipe distributed by:
Frick-Reid Supply Corp.
Bradford Supply Co.
Republic Supply Co. Superior Tube Co.
Our own stocks at Houston, Texas



GENUINE PUDDLED WROUGHT IRON
READING PIPE
DIAMETERS RANGING FROM ⅛ TO 20 INCHES

Science and Invention Have Never Found a Satisfactory Substitute for Genuine Puddled Wrought Iron

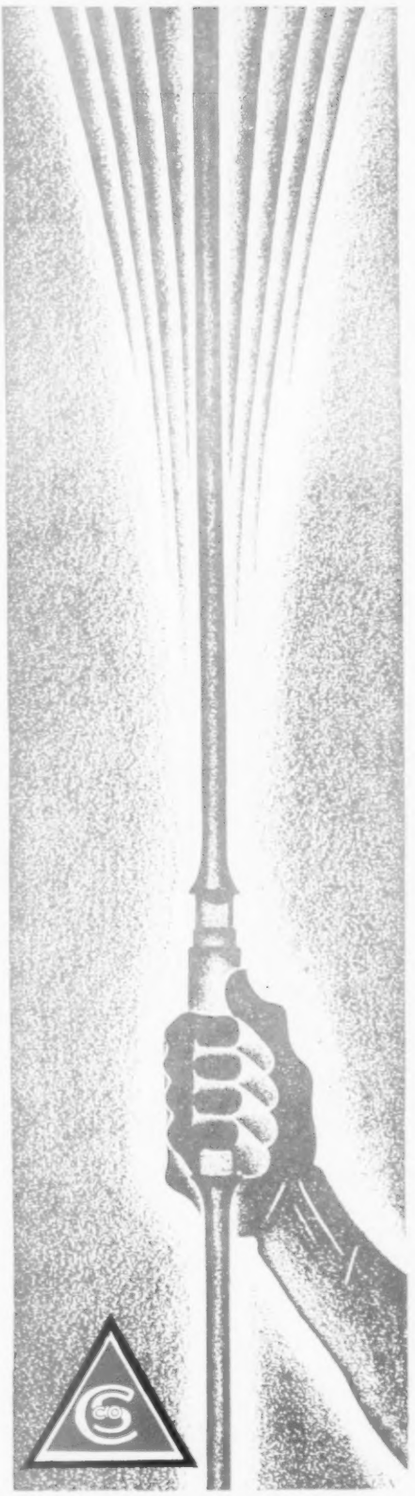
This Steel has VIBRATION Whipped that's why

D+B

HEATREAT

SUCKER RODS

Give Better Service and Have Longer Life



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224 Traders Building, Calgary, Alberta, Canada

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CONTINENTAL EMSCO COMPANY, INC.
74 Trinity Place, New York
London Offices: 316-17 Dashwood House, Old Broad St., E.C. 2

CONTINENTAL EMSCO S. A. R.
7, Strada Eminescu, Ploesti, Romania

CONTINENTAL

SKILLED SUPERVISION GUARANTEES THE QUALITY OF GULF PRODUCTS

COASTAL AND PARAFFINE CRUDES
GASOLINE—LUBRICATING OILS
NAPHTHA—GAS—OILS
WAX—PETROLEUM COKE
CYLINDER—ENGINE—CORDAGE

GULF REFINING COMPANY

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New York Harbor (Bayonne, N. J.)
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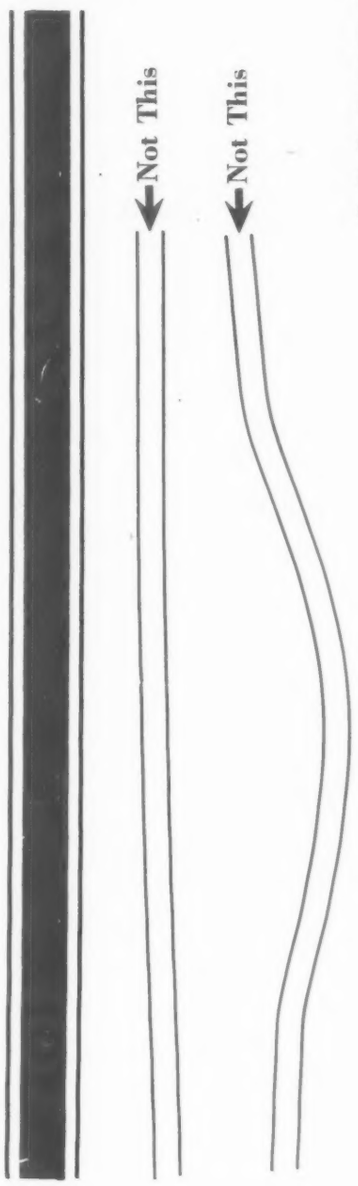
Port Tampa, Fla.
Mobile (Magazine Point, Ala.)
Philadelphia (Girard Point, Pa.)
Charleston, S. C.
Savannah, Ga.
New Orleans (Gretna, La.)
Port Arthur, Texas
Galveston, Texas

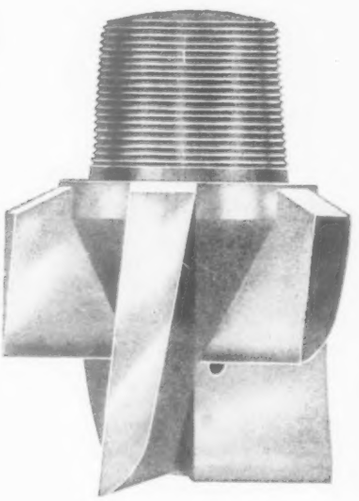
Straight Hole

all the way down



Brewster

A. P. I. Straight Hole Rock Bit is primarily designed to cut a straight hole.



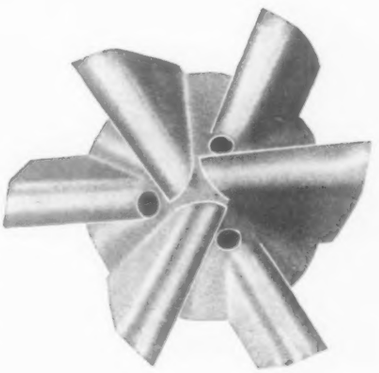
Straight hole is nine-tenths in the design of the bit. Pilot blades at bottom, reaming blades above—this is scientific design, backed by precision manufacture in skillfully manned and splendidly equipped shops.

Ask any user about results

Also . . .

These Other Brewster Products

Include A. P. I. Shouldered Tool Joints; Perfection Core Barrels; Chrome Nickel Drill Collars; Special Fish Tail and Gumbo Bits; Core Barrel Cutter Heads for both hard and soft formations — hard formation cutter heads are faced with a substance of diamond-like hardness.



The Brewster COMPANY ~ INC.
Shreveport, Louisiana

COMPLETE STOCK carried at these warehouses: Iverson Specialty Co., Oklahoma City, phone 2-2833; Houston Store, 2000 Harrington St., phone Capitol 3021. *Distributors:* Wilson Supply Co., Houston, Beaumont and Luling, Texas; Continental Supply Co., all stores; Murray-Brooks Hardware Co., Lake Charles, Louisiana; T. T. Work Supply Co., Houston, Texas, and Lake Charles, Louisiana; El Dorado Foundry, Machine & Supply Co., El Dorado, Arkansas. *Exclusive Export Agents:* W-K-M Co., New York City.

BLUNTING THE REAPER'S SCYTHE

Time, that destroyer of property, finds the going hard in his effort to mow down IDECO Galvanized Structural Steel Derricks.

Many of the leading oil companies, foreseeing the economies and advantages in the all structural steel program have standardized on IDECO Derricks and Rig equipment.

Smaller operators who may be looking forward to the time when they may advantageously dispose of their holdings, will find their property more saleable if their wells are IDECO equipt.

THE INTERNATIONAL DERRICK & EQUIPMENT CO., Columbus, O.; Beaumont, Texas,; Los Angeles, Cal.

Plants: Columbus, Marietta, Delaware, Ohio; Torrance, California; Beaumont, Houston, Texas. *District Offices:* New York City, N. Y.; Pittsburgh, Pennsylvania; Wichita, Kansas; Tulsa, Oklahoma; Shreveport, Louisiana; Ft. Worth, Beaumont, Texas; Maracaibo, Venezuela. *Warehouses and Stocks:* Columbus, Delaware, Ohio; Seminole, Tonkawa, Drumright, Okemah, Maud, Sasakwa, Allen, Oklahoma City, Oklahoma; El Dorado, Wichita Heights, McPherson, Kansas; Houston, Beaumont, Big Spring, Odessa, Pyote, Pampa, Borger, Mexia, Luling, Wichita Falls, Grand Saline, Seguin, Hebbronville, Pettus, Texas; Lake Charles, Shreveport, Zwolle, Louisiana; Smackover, El Dorado, Arkansas; Bakersfield, Taft, Torrance, California; Hobbs, New Mexico.

Export Offices: 90 West Street, New York City; Columbus, Ohio; Houston, Texas; Los Angeles, California.

SEP -2 1930

A Gulf Publishing Company Publication

The OIL WEEKLY

Member Audit Bureau of Circulations

VOLUME 58, No. 11

AUGUST 29, 1930

Edited Weekly at Houston, Texas

SPENCER W. ROBINSON, EDITOR

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THE OIL WEEKLY

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Oklahoma Production Set At 550,000 Barrels Daily

By GRADY TRIPLETT

TULSA.—Oklahoma producers in session here August 22 unanimously approved limitation of crude oil output for the state to 550,000 barrels daily for September. The day previous, producers of the Oklahoma City field met there and approved the curtailment necessary to bring that field within the limitation. Prior to September 1, a petition will be field with the corporation commission, asking that the schedule be made an order of that body.

Opposition, which had been threatened by Oklahoma City producers, failed to materialize. When the proration committee of Mid-Continent Oil & Gas Association met August 19 to fix its recommendations, opposition to the whole schedule was voiced from some Oklahoma City producers, who maintained that the allowed output for that field should be raised. Intimations were that any schedule, which failed to give this pool additional outlet, would be opposed in the meeting August 22 and later before the corporation commission.

The turn of affairs between the two meetings was such that every indication now is that production for Oklahoma in September will remain at 550,000 barrels daily. To accomplish this some changes had to be made in field schedules but in the main the ratios of production to potential output are little changed.

The meeting August 22 revealed that several disturbing elements in the proration program for the state had been put in better order during the week. The threatened action against the C. C. Julian Oil & Royalty Company of Oklahoma City was never filed, because of the decision of officials of that concern to abide by orders of the corporation commission. One Oklahoma City well of that concern was allowed to produce longer upon completion than the proration order specifies.

This led to preliminary work on the part of the legal division of the proration committee. Papers were prepared and a conference held with representatives of the Julian company. At that meting officials of the company agreed to abide by orders.

A statement from this legal division was given at the meeting here to the effect that four actions are possible, each calculated to bring any individual or oil producing company in line with proration orders of the corporation commission. Statutes provide:

(*Continued on page 74*)

Potential and Allowed Production — State of Oklahoma Proration Schedule September 1, 1930 to October 1, 1930

Field—	September, 1930 Estimated Potential	Estimated Production
Production Allowed—50 per cent.		
Allen (Wilcox)	9,000	4,500
Allen (Cromwell)	17,927	8,964
Bowlegs	28,327	14,164
Carr City	10,494	5,247
Earlsboro (old)	28,665	14,332
Earlsboro Townsite	10,000	5,000
Little River	46,528	23,264
East Little River	22,000	11,000
Marshall-Lovell	5,650	2,825
Maud	5,712	2,856
Mission	14,673	7,337
Sasakwa	9,500	4,750
Searight	13,205	6,602
Seminole	28,470	14,235
East Seminole	4,145	2,072
St. Louis	38,972	19,486
Sub-total	293,268	146,634
Production Allowed—25 per cent		
East Earslboro	40,000 (min.)	15,000
South Earslboro	35,000	8,750
Sub-total	75,000	23,750

Field—	September, 1930 Estimated Potential	Estimated Production
Production Allowed 18¾ per cent.		
West Asher-Wanette	35,000	6,563
Konawa (adjusted)	68,000	12,750
Sub-total	103,000	19,313
Production Allowed—Adjusted Maximum		
Tatums	12,000	2,500
Chandler	30,000	2,500
West Perry	1200	600
Orlando	850	400
Twp. 20 N.-Range 4 West	800	400
Sub-total	44,850	6,400
Oklahoma City	700,000	88,903
Wells, in Prorated Areas, Not Prorated	5,000	5,000
Total—Prorated Areas	1,221,118	290,000
Outside Areas—Not Prorated	260,000	260,000
Total State	1,481,118	550,000

Texas Allowable Production Revised to 775,000 Barrels

By H. J. STRUTH
Staff Economist

AUSTIN, Texas.—As a result of the many protests and heated discussion of the Texas proration plan, during the hearing held by the Texas Railroad Commission at Austin on Monday, August 25, a new order has been issued by the commission, effective August 27, whereby the state allowable production figure has been changed to about 775,000 barrels daily. The only material change in the set-up, however, is that the Gulf Coast limit has been set at the actual production on August 16, amounting to 177,800 barrels. This, and a slight revision in Southwest Texas has added about 25,000 barrels a day to the quota formerly set by the commission. While the plan adopted is to be in effect for 90 days, beginning August 27, provision has been made to limit Gulf Coast production for a period of only 30 days, in order to give operators there an opportunity to carry out present plans of curtailed drilling and prove that they can reduce output through a natural decline with the same effect as designed by the former proration order.

Under the new order, production of the Gulf Coast will be held at the August 16 actual figure for a period of 30 days, during which time no new well or offset well drilled in this area will be allowed to produce more than 500 barrels a day. It is also provided that all wells drilled in the Gulf Coast area must be properly tubed and choked to maintain a normal gas-oil ratio. West Texas production will be further reduced to 274,000 barrels daily, while production of Southwest Texas has been slightly increased to about 82,200 barrels daily. Following is the approximate line-up by major producing districts, as set forth in the latest order of the railroad commission:

	Production Limit	Period
Panhandle of Texas	80,000	90 days
North Texas	69,000	90 "
West Central Texas	52,000	90 "
West Texas	274,000	90 "
East Central Texas	40,000	90 "
Southwest Texas	82,200	90 "
Coastal Texas	177,800	30 "

While most operators present at the hearing on Monday, August 25, expressed a desire to co-operate in bringing Texas crude production down to a normal level, there were very few that seemed willing to do anything in that direction. In fact, as each district was heard from, it became more and more evident that an attempt was being made to evade the issue and stall for time. Judging from the evidence submitted, one would have gained the impression that the demand for Texas crude is greater than the current supply and obviates the necessity for a program of curtailment as previously outlined.

As each district committee chairman presented his report there was a barrage of protests on one ground or another. Some operators felt that the method outlined by the Railroad Commission was unfair and discriminatory. Others stated that they were obligated by contracts to produce even more oil than they are now producing. Age of individual fields, depth of producing sands, water troubles, unreturned investment and numerous other difficulties were cited as sufficient evidence to prevent the carrying out of the Railroad Commission's proration order.

Underwood Nazro, Gulf Production Company, entered a strenuous protest against the method proposed, stating that it was discriminatory and not on a conservation basis to exempt marginal wells. In his opinion, the small wells contribute just as much to over-production as the large wells and therefore, every producing well in the state should be included in the proration order. In reply to Mr. Nazro's protest, Robert R. Penn, chairman of the Technical committee, stated that the first principle of conservation is to prevent physical waste and that if thousands of marginal wells are shut in they will be ruined and such action would indeed throw a monkey wrench into the machinery of the oil industry of Texas. W. S. Farish, president, Humble Oil & Refining Company, said that he noticed that the margin in most fields was put high enough to include all wells in some districts and expressed the opinion that the margin should be whittled down considerably. He also stated that the North Texas operators do not have a market for all of the oil they desire to produce and that his company is not willing to buy oil and store it in order to protect six-barrel wells. He said this district can not show that there is a market for 69,000 barrels of oil a day.

At one time the discussions became quite tense, Underwood Nazro stating that he believed there was too much hypocracy about this proration affair. He cited an instance where Robert R. Penn, chairman of the committee, came to Houston to endeavor to obtain a lease of some Gulf Production Company property which he desired to develop and also pointed out that he (Penn) was responsible for the opening up of Ector County development, when at the same time he is championing the proration movement in Texas. He said that this indicated to him that there is a tendency to prorate the other fellow while the leaders of this movement are producing all the oil they can. In answer to Mr. Nazro's statement, Mr. Penn said that the very fact that the Gulf Production Company has been the chief objector to every move made to curtail oil production in Texas is sufficient evidence to prove that the Gulf Production Company wants everybody but itself to prorate.

Pipe Line Companies Can Help

Whether the railroad commission has the power to enforce proration or not, it looks as though the pipe line companies will have a strong influence upon the immediate future course of production in Texas. Mr. Mauser, Prairie Oil & Gas Company, emphasized this fact by stating that his company has nominated to purchase 15,000 barrels daily in the Ranger district and 7500 barrels daily in the Wichita Falls area and had instructed Pure Oil Pipe Line Company and Prairie Pipe Line Company to run all the oil produced in these districts

(Continued on page 79)

Texas Proration Launched by Efficient Committee Organization

THE launching of state-wide proration in Texas on August 27 found practically all producing districts of the state prepared to carry out the Railroad Commission's orders through the agency of sectional committees appointed by the various operating groups.

Opposition to the plan brought out at the hearing at Austin Monday will not alter the status of the various sectional committees, although it is believed that they will be obliged to hold frequent local meetings in order to hold the state total at the new figure of 775,000 barrels.

North and Central West Texas

Approximately 23,000 pumping and flowing wells are involved in the proration scheme that is applied to the North and Central West Texas districts, which are divided into two parts for the purpose of reducing the daily output of both to 121,000 barrels. North Texas has considerably more than 50 per cent of the above number of wells, and is restricted to 69,000 barrels, while Central West Texas has been assigned a quota of 52,000 barrels. Operators in the latter district assembled at Eastland on August 16 and elected a district proration advisory committee, and subcommittees to represent one or more counties, and similar steps were taken by operators in the North Texas district during a meeting held in Wichita Falls on the same date. These committees will assist the Texas Railroad Commission in applying and enforcing the state-wide proration order that went into effect 7:00 a. m., August 27.

Operators in the North Texas District Elected

Merrill W. Blair, president of United Producers Company, as chairman of the general committee. Other members of this committee include: E. H. Eddleman, manager American Refining Properties, Inc.; L. H. Cullum, independent operator; Chas. P. McGaha, vice-president, Fain-McGaha Oil Corporation; and T. O. Shappell, manager Shappell Oil Company, all Wichita Falls.

This general proration committee is aided by seven subcommittees that represent operators in one or more counties, thereby lessening the detail work of the former to a great extent.

The personnel of these sub-committees follow:

Archer County: J. A. McCarty, McCarty Oil Company; Roy Riner, Riner & Bailey; and J. L. McMahon, division manager The Texas Company.

Baylor County: John F. O'Donohoe, president Petroleum Producers Company; W. T. Knight, president Consolidated Oil Company of Texas; and H. A. Ecklund.

Clay County: J. F. Merrick, E. V. Foran, production engineer, Fain-McGaha Oil Corporation and C. W. Hanley, zone agent, Gulf Production Company.

Cooke County: Bert L. Broday, division superintendent, Humble Oil & Refining Company; A. J. McCown, production superintendent, Kewanee Oil & Gas Company; and T. S. Stoneman, independent operator.

Montague County: J. S. Bridwell, Bridwell & Mayfield; M. H. Shanahan, field superintendent, Continental Oil Company; and Phil F. Lesh, Lesh & McCall.

Wilbarger and Foard Counties: J. Pat Barkley, Barkley & Meadows; E. R. Fain, president, Fain-McGaha Oil Corporation, and G. E. Goddard, district superintendent, Empire Gas & Fuel Company.

Wichita County: W. D. Brookover, vice-president, Panhandle Refining Company; H. P. Hodge, district superintendent, Magnolia Petroleum Company, and R. A. King, president, King Royalty Company.

John M. Gholson, veteran operator of Ranger, was elected chairman of the Central West Texas general proration committee. Other members of this committee include: John M. Mouser, division agent for Prairie Oil & Gas Company; J. T. Anderson, Cisco; H. P. Evans, Brownwood; and Dr. E. R. Riggs, Graham. Chairman of each sub-committee, which has jurisdiction over one or more counties follow:

M. G. Cheney, Fort Worth, Coleman and Runnels Counties.

W. G. Sawyer, Brownwood, Brown County.

W. G. Conway of Conway Brothers & Champion, Ranger, Eastland County.

E. W. Moutray, president Moutray Oil Company, Abilene, Callahan County.

George Callahan, Albany, Shackleford County.

Terry West, Breckenridge, Stephens County.

L. C. Harper, president Harper Petroleum Corporation, Bryson, Jack and Palo Pinto Counties.

Bert Wiseley, Throckmorton County.

Appointment of a chairman and committee for Young County was deferred at the suggestion of Dr. Riggs.

In the event North and Central West Texas operators succeed in curtailing production to the 121,000-barrel level this particular section of the state will then be averaging only 5¼ barrels per well per day. Such an allowance would indicate possibly forced abandonment of thousands of wells, but provisions are made in the commissioner's order for special production privileges for so-called marginal wells, which include wells that are nearly depleted and those that are handling a high percentage of water.

Recognition of the variance in drilling and lifting costs on crude is to be given wells in the two districts by exempting all wells that are producing not in excess of six barrels daily from depth of 2000 feet or less. All wells between the 2000 and 3500-foot level are to be relieved of proration penalties when production does not exceed 12 barrels daily, while a 20-barrel daily maximum has been set for wells below the 3500-foot level. This plan offers protection for the old settled pumping and flowing wells, and throws the burden of proration largely on the more recent completions that are still in a semi-flush stage.

Independent companies and operators predominate in the two districts as well owners and operators, and are taking the initiative in establishing committees that will work out

each local problem to be submitted to the Texas Railroad Commission for approval. The latter body is content to allow operators in each county and district handle such details, and if possible make all decision by mutual agreement.

A noticeable curtailment of field work has already appeared in the two districts, and a number of counties will decline naturally to the fixed production quota shortly after new production is checked. This pending loss in new production will be partially offset by shut in production being opened up in a few areas of each district. This shut in production is due to pipe line companies having refused to connect with the wells, or because of the latter having limited their takings from leases. Under the terms of the commission's order, pipe line companies can be forced to serve such wells, and build additional lines if necessary to make connections. A case of this kind has been set for hearing by the commission on September 3, as Young Brothers & Alexander, Inc., and Primrose Refining Company have asked that Continental Pipe Line Company, subsidiary of Continental Oil Company, extend its line to the Newcastle field, Young County, and accept oil for common carrier shipment to the Wichita Falls plant of the Primrose Refining Company.

Wichita County is the largest source of oil production of any single county in the district, with a daily output of 24,450 barrels from 7475 pumping wells. No figures have been made public as to number of wells and volume of oil to be prorated in this county, but even at its present unrestricted production the wells are averaging only 3.27 barrels daily each. Wilbarger County has a much better average, with a daily output of 21,500 barrels from 1375 pumping and flowing wells. Young County is credited with 1370 shallow and deep wells that are making about 18,500 barrels daily. Stephens County is averaging only 5.38 barrels daily per well, with 1040 wells making 5600 barrels daily, and the majority of these are in the deep lime horizon.

Chapman Field

Support of all operators taking part in the development of the Chapman field, Williamson County, on the statewide proration plan was voted unanimously at a meeting held in Waco August 14. The field is entirely controlled by small independent companies and individual operators, and is the only one of any appreciable size in the state in which major interests are not participating directly or indirectly. Chapman field operators went on record at the meeting as favoring a proration allowance of less than 50 per cent, or whatever figures is fixed by the Texas Railroad Commission in order that the area may bear an equitable share of the general crude production cut.

C. P. Link, vice-president, Sequoia Oil Company, Fort Worth, was elected chairman of the Chapman field proration advisory committee. Other members include: E. R. Marts, Dallas operator; and J. G. McIntosh, representative of the E. L. Chapman Interests, Fort Worth. Earl B. Mathews, secretary-treasurer, Sequoia Oil Company, was elected secretary.

A survey of the Chapman field taken just prior to the Waco meeting reveals that estimated potential production is now 40,088 barrels from 78 completed wells in the 1600-2000-foot Serpentine and chalk formations, with a productive area of about 400 acres. Flowing wells are in the majority, as the field has 45 producers that are on natural flow, and 33 wells on the pump. The survey credits the field with being virtually defined on all sides, with approximately 30 inside locations remaining to be drilled. The Sequoia Oil Company is given the largest potential production, having 9960 barrels from six wells on its T. P. Simmons "B" lease. No 6 well on this lease was completed August 1, making 960 barrels during first two-hour gauge from Serpentine at 1635 to 2038 feet, thus setting a record for the field on thickness of oil bearing formation.

Current production in the Chapman field ranges from 10,000 to 15,000 barrels daily, but the two independent pipe lines furnishing the only crude market outlet have announced that their combined oil requirements during the next 30 days will be about 18,500 barrels daily, and possibly greater for the following 60 days. Williamson County Pipe Line Company announced that its crude committments during the 90-day proration period will total 9500 barrels daily, while Chapman Pipe Line Company placed its crude requirements from the field at 9000 barrels during next 30 days, and between 12,000 and 15,000 barrels daily for the following 60 days. The latter is starting deliveries on a 100,000-barrel spot sale made through Southern Oil & Refining Company, El Dorado, Arkansas, to Standard Oil Company of Ohio, which has plants at Toledo and Cleveland. Shipments will be made in tank cars from rack at Thrall. Chapman Pipe Line Company is contracted to provide crude for the new refinery being erected at Taylor, Texas, by Taylor Refining Company.

Williamson County Pipe Line Company is making heavy crude shipments over its Thrall rack to the Houston refinery and export terminals of Sinclair Refining Company, and is also contracted to supply entire crude requirements of a 3000-barrel refinery being erected at Thrall by C. A. Middleton and associates.

Panhandle

Operators in the Texas Panhandle assembled at Amarillo August 14 and gave their approval of a proration plan to limit the crude output of the district to 80,000 barrels daily, with all leases averaging less than 50 barrels daily per well exempt from restrictions. This proration plan is in line with the state-wide program fostered by the Texas Railroad Commission. Only a small percentage of the total number of oil wells in the Panhandle will be subject to production penalities by placing exemptions at an average of 50 barrels daily.

Panhandle district has an estimated potential daily crude yield of 110,000 barrels from 1740 flowing and pumping wells. Leases bearing about 1365 wells are averaging less than 50 barrels daily production per well, or about 60,000 barrels daily, and this group will fall within the non-prorated classification, unless new wells are added. It is estimated that the district has 375 wells on leases that are averaging more than 50 barrels daily per well, and their combined daily potential is approximately 50,000 barrels. The latter group will share in the remaining 20,000 barrels market outlet on a basis of average potential production, which will be revised at regular intervals throughout the proration period.

Tests underway on the date of proration enforcement and direct offsets that must later be drilled against the former are being prorated on the same basis as old wells. Future drilling on wildcats, inside locations and tests required by lease obligations will not be tabooed, but such completions will not be allowed to produce more than 50 barrels daily for 90 days, while their offsets will likewise be penalized. After the elapse of the penalty period, said wells will be placed on an average potential basis, if production continues in excess of 50 barrels daily per well. The purpose of such a plan is to discourage unnecessary field work which is expected to result with only a 50-barrel daily al-

lowance for 90 days, while at the same time operators with short time leases, or other drilling obligations will not be hampered otherwise by proration rules.

The proration plan as adopted by Panhandle operators was devised by a committee of nine, headed by J. H. Clark, vice-president of Midwest Exploration Company, Amarillo. This committee was created at a meeting of operators held at Pampa on July 28, with H. M. Stalcup, vice-president in charge of production for Skelly Oil Company, Tulsa, presiding.

An advisory committee consisting of 11 representatives of the leading producing units in the Panhandle was created at the Amarillo meeting to gather information and work with the Texas Railroad Commission in carrying out the proration plan. Clark was elected chairman of this committee, which also includes:

F. J. Adams, North Texas agent for Gulf Production Company, Fort Worth.

J. M. Baldridge, vice-president, Shamrock Oil & Gas Company, Amarillo.

Ed. G. Daly, president, Mordyan Petroleum Company, Pampa.

Joe Danciger, vice-president, Danciger Oil & Refining Company, Amarillo.

Geo. A. Dye, vice-president, Wilcox Oil & Gas Company, Tulsa.

F. P. Graham, production superintendent for Skelly Oil Company, Skellytown, Texas.

W. E. Hubbard, division superintendent for Humble Oil & Refining Company, Amarillo.

Clyde Shields, Prairie Oil & Gas Company, Amarillo.

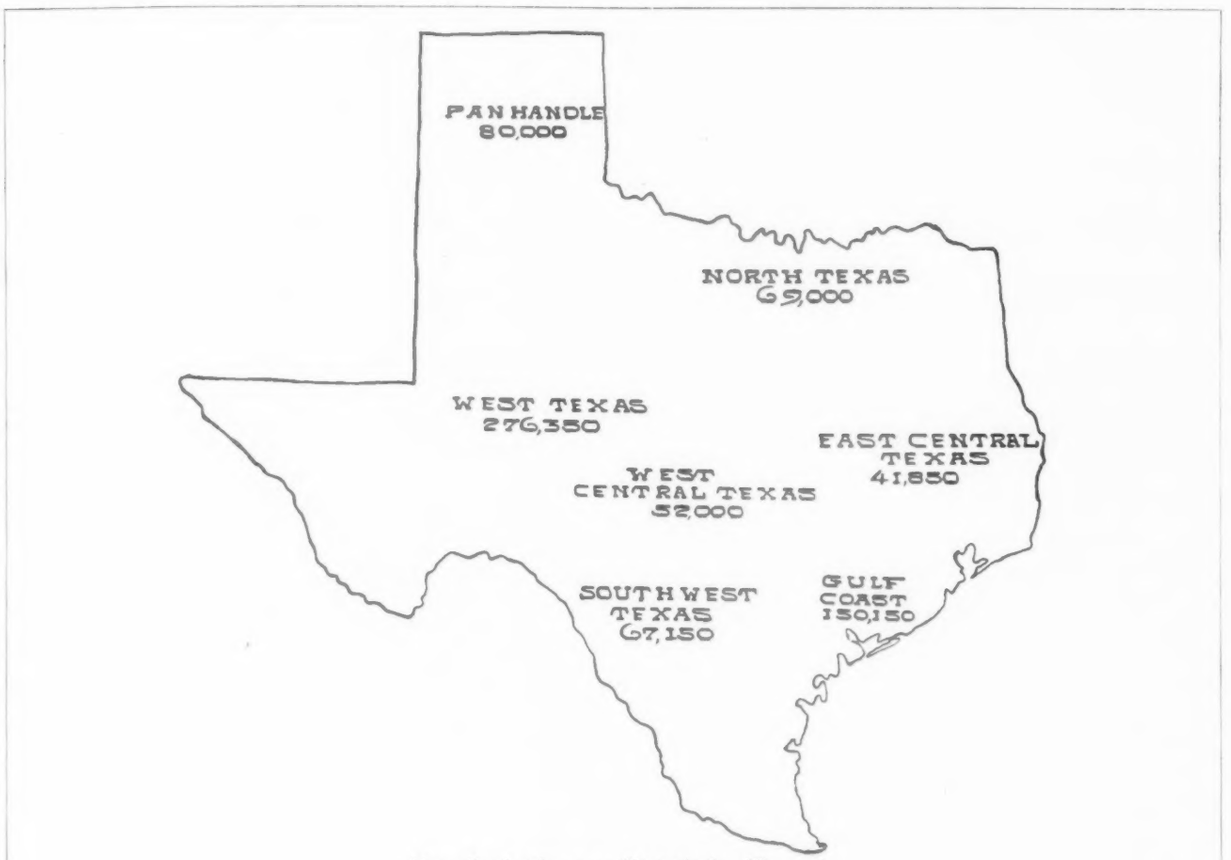
A. C. Smith, assistant division manager for The Texas Company, Wichita Falls.

J. E. Warren, field superintendent for Continental Oil Company, Borger.

Only two operating companies cast negative votes when the proration plan recommended by Clark's committee was presented for approval, while two other companies withheld their views. Phillips Petroleum Company and Danciger Oil & Refining Company voted against the plan, although favoring proration in another form, while Gulf Production Company and Magnolia Petroleum Company were the non-voters. Phillips Petroleum Company is the ranking producer in the district, having a daily yield of about 19,450 barrels, or approximately 21 per cent of the current output of the district. However, the latter company has comparatively few leases averaging more than 50 barrels daily per well, and these are in the Bowers-Jackson and Finley-Brown areas, Gray County.

Six counties are producing oil in the district from lime and granite wash formation averaging between 2800 and 3000 feet. The gravity of the oil varies from 34 to 43 degrees, and prevailing posted prices are on a gravity scale basis, which has always been considerably less than Mid-Continent gravity scale quotations because of the sulphur content of the crude. The price penalty in the Panhandle has been more severe since West Texas sulphur oils have been a factor in the general crude market situation. In fact a heavy shrinkage in crude oil market via trunk lines of major companies has been sustained within the past two years by Panhandle operators because of these major companies filling a portion of their sulphur oil requirements from West Texas and in recent months from New Mexico.

Elimination of crude price sacrifices forced upon a number of operators in the Panhandle within the past year because of companies that adhere to the posted price having



How Production was Tentatively Allocated

limited their takings is expected, now that proration is in effect. A few local refineries and several independent crude brokers have been able to buy their requirements at distressed prices, and the latter make shipments from the district in tank cars. With a maximum production allowance of 80,000 barrels daily the district will not be producing in excess of the current requirements of the seven local refineries and four separate major trunk lines, thus enabling all producers to demand and receive the market price for their production. Promise of a stabilized price structure induced a number of independent operators to support the proration plan, as major companies are not to discriminate in their crude buying under the terms of the law.

Crane and Upton Counties

Operators in the Crane-Upton County district adopted a proration plan to reduce production from 42,000 to about 32,000 barrels daily in order to contribute 10,000 barrels towards bringing the West Texas disetrict within its limit of 276,350 barrels as fixed by the Texas Railroad Commission during a meeting at Fort Worth August 18. L. E. Barrows, division manager of The Texas Company, presided at the meeting and was elected chairman of the proration advisory committee, which will proceed with the production curtailment program as soon as the Commission approves recommendations made by the operators.

The Crane-Upton district is divided into two parts in carrying out the proration plan, with the Church-Fields-McElroy area sustaining a production cut of about 8130 barrels, while the so-called McCamey area, which is made up of a group of closely related fields in the south half of the district, will be asked to contribute 1870 barrels towards the 10,000-barrel cut. The McCamey area is now averaging 7865 barrels daily from 280 pumping and flowing wells, and it is planned to exempt all wells from proration that are making 25 barrels or less. The latter area has 197 wells that are to be exempt from production penalities, while the remainder are allowed to make 25 barrels plus their potential percentage of that portion of the market outlet remaining to be distributed among the larger producers. This plan will force Humble Oil & Refining Company to discontinue its current practice of accepting only 50 per cent of the output of wells that its lines serve. Such restrictions instituted June 1, 1930, with no exceptions made for small pumpers.

The Church-Fields-McElroy area will fare better on individual well allowances although bearing the heaviest portion of the curtailment. This area is averaging 34,166 barrels daily from 305 wells, and will exempt all wells that make less than 50 barrels daily. There are about 140 such wells. The remaining wells will then be given a 50-barrel quota plus their percentage of balance of the market outlet, with percentages based on potential output of individual wells. Provisions have been made in the proration order to allow special production allowances to wells making large quantities of water, while operators are permitted to exercise their best judgment in handling their prorated wells, provided unfair advantage is not taken of offset lease owners.

The Texas Company will be forced to bear a heavy production cut under this proration plan because of its State-Strip 11, located on the south end of the Church & Fields area, having a current output of 3450 barrels daily. This well is apparently producing from a crevice, and has yielded more than 5,000,000 barrels of pipe line oil since August 9, 1927. Gulf Production Company likewise shares heavily in the production restrictions on its McElroy properties, which have a number of flowing wells. The latter company protested against the proration plan.

The proration advisory committee for this district consists of the following: L. E. Barrows, division manager of The Texas Company chairman.

J. R. Gahan, Tidal Oil Company.

F. J. Adams, Gulf Production Company.

Fred G. Liedecker, Atlantic Oil Producing Company.

W. L. Todd, Simms Oil Company.

John Mouser, Prairie Oil & Gas Company.

C. E. Yager, Texas Pacific Coal & Oil Company.

John C. McIntyre, Continental Oil Company.

Texas Gulf Coast

Those taking the lead in the Texas Gulf Coast in the proposed state-wide production curtailment program have concentrated their efforts principally toward bringing about decreased drilling activity and further pinching in of flowing wells, and basing their hopes largely on those measures, they expect to do their part toward reducing the crude production of Texas.

Late last week P. C. Murphy of Houston, assistant to the president of Humphreys Corporation, general chairman for the Gulf Coast in the conservation move, had not yet received detailed reports from the committees in all fields as to their plans for curtailment, but he had received assurance of cooperation from virtually all fields in preliminary written or verbal reports by committeemen. In nearly all cases those preliminary reports had the same tone, there being general indication that the operators would for the most part agree to pinch down flowing wells and limit further drilling to lease obligations. Mr. Murphy expected to have final reports from the various fields by Saturday, August 23.

Some of the principal protestants to the proposed state-wide conservation program when it was under advisement by the Railroad Commission of Texas were from the Gulf Coast fields, and the success of the program has been regarded as dependent to considerable extent on the attitude of the Coastal operators. While it was suggested at Austin at the hearing before the railroad commission that the Gulf Coast cut its output by 15 per cent, that figure was purely arbitrary and without any particular basis, and in their efforts to aid in the state-wide conservation plan the Coastal operators have not set any fixed amount of production decrease as their goal, finding it impractical to strive for any absolute cut at a set time and on a predetermined barrelage basis. Instead, they are striving to bring about the desired production decrease by producing flowing wells through small chokes and by limiting further drilling, thus allowing natural decline to contribute to the desired end. Curtailment on this latter basis is receiving the endorsement of most of the operators. It eliminates numerous objections by exempting the many small pumping wells from restricted output.

Such procedure in reducing production was given the approval of operators in most of the Coastal fields, including Barbers Hill, Refugio, Humble and Pettus, and steps had already been taken last week toward curtailment on that basis.

It was brought out at a meeting of Refugio operators that the field had had a decline of 7800 barrels in daily production in about 30 days, and the operators there

(*Continued on page 84*)

Turbine Air Lift Pump Applies New Principle

By BRAD MILLS
Staff Representative

DEVELOPMENT of oil sands which were out of reach of the drill a few years ago has necessitated many changes in pumping equipment and methods, with the decline of these sands presenting problems which could not be solved by application only of principles effective in pumping shallow producers or deep wells having high fluid levels. Crooked holes and mechanical difficulties encountered in pumping very deep wells added to the more common troubles, making the pumping of many low fluid level producers unprofitable or unsatisfactory.

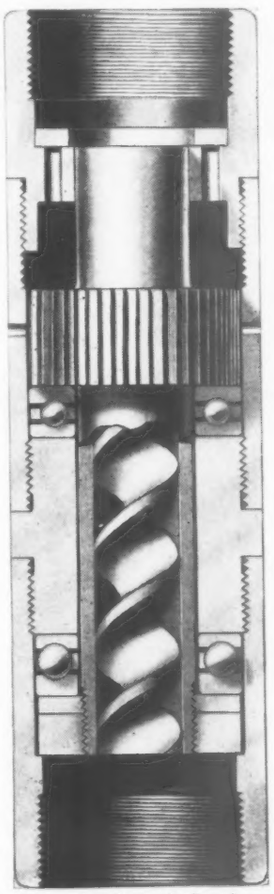
Prior to the development of the more recent types of pumps, oil well pumping methods have been based on two primary principles, all previous improvements having been made with the basic action left intact. These two methods were the reciprocating and air lift types, the former being the more common action in which the force or power is transmitted to small pistons operating in cylinders below the oil level in tthe well, and the latter employing air or gas by sending it down to a point below the surface of the oil, jetting it upward below the fluid and using the pressure of the agency (air or gas) to force the oil to the surface. The former method is almost as old as the industry itself, while the principle of the latter has been employed in various ways for ages.

Perfection of the Continental Turbine Air Lift Pump brings into action a third principle, the rotating effect creating an atomizing method of lifting oil to the surface. The method is revolutionary, in that a rotary motion is employed for the first time, air or gas under pressure furnishing the motive power. The ejection of the air or gas is accomplished in such a manner as to impart a great rotating movement to the inside pump mechanism below the surface. Atomization of the oil is accomplished mechanically by the use of vanes, which close and open ports in rapid succession. Tubing is used to conduct the fluid to the surface, the oil being forced upward from the fluid level by the combined action of mechanical atomization and hydrostatic load relief.

The turbine air lift pump is the result of experiments started several years ago by Ralph H. Tucker, who succeeded in developing this principle for lifting fluid for water well service. About six years ago he perfected the first mechanical means of atomizing water and oil, following up the discovery with several improvements. About a year ago tests were made in extremely deep wells, pumps having been installed at depths ranging down to 5000 feet.

In working out the new type of pump, Tucker attempted to perfect an installation which would reduce the load through atomization. The old pumping method, using the common pump and sucker rods, forced the lifting of oil against the hydrostatic load, while the gas or air lift process employs pressure to force the oil from the hole by exceeding or overcoming the hydrostatic load. It was readily apparent that the fluid was not pulled or drawn up into the oil column by either of the common methods. The goal was an apparatus that would draw in the oil and atomize it mechanically to facilitate the lifting process.

A study of the action of the turbine pump reveals its simplicity, although a superficial examination often leads to the impression that the installation is a complicated device. Flexibility of tthe apparatus provides for a wide range of conditions. The principle employs the use of a minimum pressure of air or gas after the kick-off into an enclosed area in the bottom of the tubing and its subsequent introduction into the main pumping element through small angled port holes. The pressure is then thrown across, or trajected, through tthe medium of small port holes tangentially arranged, operating a motor which functions on the order of a steam turbine. The small motor inside the main pump is equipped with a continuous series of 41 vanes, or angular faces. A small impeller, or screw, built integral with the motor, rotates, literally picking up the fluid from the main reservoir. The air or gas leaves the motor through small port holes and strikes the oil column at the upper end of the pump. This causes atomization, the air or gas being mixed with oil by the mechanical action. Slipping of the gas or air is obviated by use of a restricted size of tubing to the top of the pump, the oil flowing or riding along with the gas by atomization. The fluid is brought to the surface and sent to the flow tanks, the gas separating from the oil and quickly leaving the latter in its natural state.



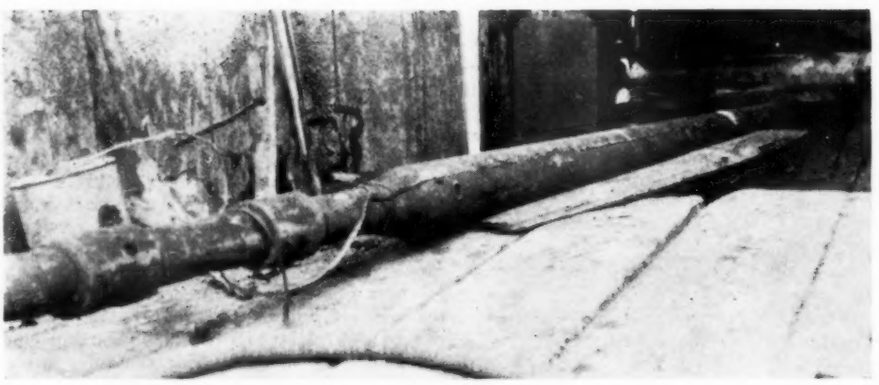
Cross Section of Continental Turbine Air-Lift Pump

Operation of the pump requires a higher pressure in the kick-off, but this pressure drops after the column of atomized oil is accumulated. As the pumping level declines, the running pressure may be lowered, the drop in pressure being accounted for by overcoming of inertia. The shifting of gears in an automobile or changes of speed and gear ratios in electric motors after inertia has been overcome are illustrations of a similar principle.

Two sets of ball bearings are used below the motor, or turbine, but they serve only as a guide and have very little thrust placed upon them. The blowing action of the gas or air prevents sand from injuring these bearings. Sand in the column falls back through the opening when the pump is stopped for any reason, tests having shown that the pump can catch only a small amount of sand. This small settling is lifted up when pressure is again applied. Experiments in deep wells have proven satisfactory and the pump seems to be adapted to producers having a low fluid level or in crooked holes where sucker rods are a source of trouble.

The pump assembly in the size adapted to 2½-inch tubing is slightly less than 15 pounds, less tubing. Intake pressure is adjusted by submerging or raising the pump, but the condition of the producer usually determines the point of installation. No special fittings are employed, the main pump element completing the installation.

Roumanian Uses War Knowledge In Perforating Casing



Maze machine gun, for perforating casing in situ

MONSIEUR DELAMARE MAZE, who served in the French army during the World War as an expert on ballistics, believes in beating his sword into a plow-share. His particular "sword" was represented by his knowledge of explosive gained in testing out thousands of inventions offered military authorities during the course of the great struggle; but he was able to convert it into a useful implement upon his return to peace-time pursuits.

Three or four different sand strata are irregularly productive of oil in Roumanian fields; and operators who fail to find substantial production from the upper sands usually case them off, as required by the mining authorities, and continue drilling in hope of finding better production in the deeper sands. It sometimes happens, however, that the lower sands are not so fertile as the ones already passed up, in which event the operator is faced with a perforating job in order to reach the pay zones which have been cased off. It is for work of this sort that the Maze "gun" is designed.

The "gun" consists of a solid steel rod about 20 feet long with a diameter but slightly smaller than the casing in which it is to be inserted. It is run on the end of a bailing line; and, while it was not seen in operation, it would be good practice to run it below a set of cable tool jars, so as to be able to jar it loose in case it should become stuck in the hole.

M. Maze's "gun-barrels" are formed by drilling holes of the required diameter,—i.e., the diameter of the perforations desired,—into the solid steel bar. The depth of these holes is, of course, limited by the diameter of the bar; but, in the usual case, their depth is comparable to the length of the barrel of 45-calibre automatic pistol. Cavities are milled out at the base of these shot-holes, into which are tamped charges of a special progressive burning powder, followed by solid steel bullets of the diameter desired for the perforations. These bullets range from 12 to 20 millimeters in diameter, and require from 20 to 30 grains of pewder, each. A soft copper plug is screwed into a recess tapped out at the mouth of each hole or "gun-barrel," its purpose being to exclude water and keep the powder dry.

These shots are discharged by means of detonators placed at the bottom of the powder cavities and connected to electric wires entering through small holes drilled at an angle from the other side of the steel bar. The wires leading from each shot-hole to the surface are welded into a longitudinal recess milled out of the side of the bar, as shown in the accompanying photograph. This is to prevent their becoming fouled or tangled when running the "gun" into the hole. The holes admitting the wires to the powder cavities are likewise protected by copper plugs, as pressures are encountered in deep wells which are sufficiently great to force fluid into any aperture or crevice, however small.

Delmare Maze, independent operator and inventor of the Maze "machine gun" for perforating casing in situ, of Caliesti, Roumania

Each "shot" is spaced according to the wishes of the operator and in conformity with sand conditions as recorded in the log of the well. Normally, about 25 shots are discharged at each run. M. Maze makes a charge of 1500 lei ($9.00) for each perforation, which totals about $225 for each "shot" of 25 perforations.

So far, he has shot about 100 wells and reports a very small percentage of failures. He has demonstrated his ability to perforate not only one but two or three strings of casing, as well as cement jackets of whatever thickness. Some few fishing jobs have been caused by bullets getting jabbed between the "gun" and the casing. Damp powder has caused some trouble also, as it is extremely difficult to exclude water while lowering the gun into position. Usually, the inventor requires the operator to bail the hole as dry as possible before undertaking to insert his "gun."

Casing Perforating Gun Used Successfully In Arkansas

A CASING perforating gun invented by William E. Rembert, well-known South Arkansas oil operator, was explained by the inventor to members of the local chapter of the American Petroleum Institute at a meeting at the Randolph Hotel, Eldorado, Arkansas, August 12.

Mr. Rembert's address on the subject of "Perforating" was illustrated by drawings of his gun which he has demonstrated in various south Arkansas fields including Smackover where there are in places four sand horizons and where perforation has been used extensively in recent months. Exhibition was made of two strings of heavy casing which were perforated by bullets from the gun. The path of the bullet was shown through two strings cemented together and the cement on the outside string showed a clean-cut round hole.

Mr. Rembert's address follows:

"The method of perforating casing in oil wells has been done in practically the same way for at least the past 25 years. Various devices have been employed for this purpose, but after all is said and done, very little progress has been made with mechanical perforators.

"It is true they will all perforate, but the results are more or less uncertain, because no device using a blade or punch has ever been made to reach farther through the casing than two or three inches at the most.

"This condition exists because a blade or punch must set against the casing wall at an angle of about 45 degrees before it will take hold. Giving the blade or punch a greater pitch and the result will be it would slide, and fail to punch at all. With this condition in mind, I began thinking of some method that would get better results with the idea of saving time and expense ever present in my mind.

"In casting about for a way to overcome the difficulties just mentioned, the thought occurred to me 'Why not shoot holes with a gun?'

"With considerable doubt in mind I began to consider this scheme. I wrote to several large arms manufacturers to know if they could build me a gun barrel not more than three inches in diameted by four and one-half inches long that would shoot through three-eighths of an inch of steel at a range of one-eighth of an inch.

"I received replies to all my letters of inquiry, but not a word of encouragement as all seemed to agree that it could not be done and argued that it was impossible to get sufficient velocity to make a perforation at so short a range. However, I was not convinced, so in October of last year, I had a small gun made and began to experiment, and found at once that it could be done and also that there were many things to overcome in handling such extremely high pressures.

"Through continuous study, experimenting and patience, I was able to overcome all the difficulties and in May of this year I completed the gun which I have brought with me to show you here tonight.

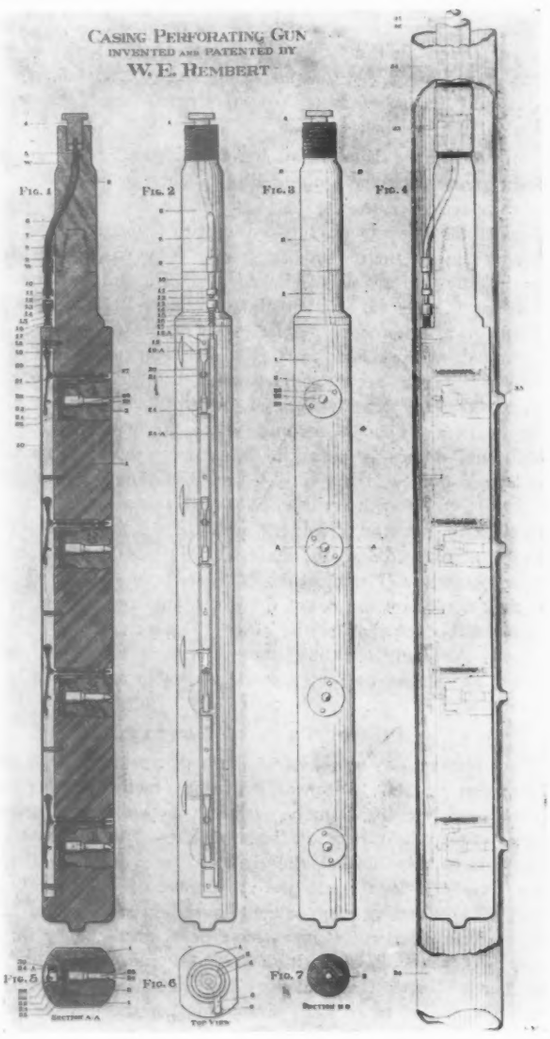
"My principal claims for this method of perforating are:

"1. It will perforate and not mutilate the casing, as it shoots smooth clean holes, leaving the pipe without burrs. A packer or swab can be run past the perforations if ever desired.

"2. I recommend it for its accuracy as it can be placed to the very inch in the horizon where the perforations are to be made.

"3. I claim to give far more penetration than is possible by any other method. The casing perforating gun will perforate with regularity two strings of casing cemented together in the usual sized hole in addition get a penetration of several inches into the sands beyond the cement surrounding the outer string of casing. Such penetration is not possible under the best of conditions by any other method of perforating.

"4. I feel that time can be saved on most jobs because of the quickness of the work, and there should be less sand bailing because of the clean round perforations."



Rembert Casing Perforating Gun

In Defense of Geophysics

By JOHN F. WEINZIERL
Consulting Geologist

FROM the recent criticism of geophysical methods one would think that some people labor under the idea that these methods at one time were the products of magic; that the present geophysicists are magicians who have lost their superhuman powers and that they now stand bereft of their rabbit foot and exposed in their black art. The writer would call to the attention of those laboring under these ideas that most geophysicists have not gone on record with claims of being able to find oil. They have relied in their interpretations upon past experience. Furthermore, reputable geophysicists in their reports have always kept an eye on many unknown quantities involved in geophysics and have only become assertive when dealing with simple problems. It is true that the human element has brought about some mishaps; but, realizing our human frailties these are negligible.

Again the writer would like to call to the attention of critics the fact that geophysical methods conceived by man and at the disposal of man are subject to his ability to interpret. This same case holds true among other professions.

Experience has brought geophysical methods to a high order of perfection on the Gulf Coast as compared with the beginning stages of 1922, 1923 and 1924. Even today no geophysicist would dream of assuming superhuman abilities, as critics would have you believe.

Mishaps there have been, but keeping in mind the many times greater activity aroused in a much shorter space of time in comparison with the periods before the advent of geophysical instruments on the coast, critics will have something to cover up in their own back yard. The writer takes pleasure in citing an article of the A. A. P. G. Bulletin, Volume 9, Number 1, page 35, written about 1923 or 1924, where W. F. Henniger makes record of the following:

"Actual drilling has practically condemned several of the most promising areas, emphasizing the fact that new salt domes are not readily located on the evidence of sulphur water alone. That it becomes increasingly difficult to find additional domes is apparent when we consider that of the 40 known domes in the Gulf Coast, 37 were found from 1901 to 1913. Of the other three, two were found in 1917 and one in 1922. Since the discovery in 1917 of the Hager-Martin dome in Section 28, T. 9s, R. 7e, St. Martin Parish, Louisiana, approximately 675 wildcat wells have been drilled in search of new domes on the coast, involving an expense estimated at $20,000,000, exclusive of the cost of leases and overhead expenses. Yet only one new dome has been found during this period and it has not yet proved profitable commercially as a source of oil."

Present Status of Geophysics

Our present day geophysical methods are far ahead in development of the two most important methods of checking geophysical results, namely, drilling methods and paleontological research. Many of the anomalies that now puzzle the geophysicist are beyond the drill, or are of such a nature that they will be misinterpreted because of the lack of sufficient cores and careful paleontological interpretation. Many times, certain structural ideas have been advanced by the geophysicists which have been discarded because an insufficient number of cores were taken. The paleontologists and mineralogists failed to give any usable idea of the lithological differences in the formations penetrated.

Geologists of today purport to show the locality of a structure with which they are familiar. They do not profess to be able to locate sand formations necessary for oil accumulation. Geophysicists soon realized that nature did not pile up sediments in beautiful sequences of sharply contracted and widespread formations, as some critics seem to assume. The fact remains, however, that very peculiar sand conditions have existed on salt dome structures drilled before the advent of geophysics, and must also exist on newly found structures. Hence, critics are narrow to the extent of being harmful to the industry when they condemn a geophysical prospect because of the failure of one test well.

Present Drilling Methods

The writer would call the attention of critics to the fact that the human element plays an enormous role in the drilling of wells. It is the jargon of the street that "that outfit" couldn't make an well in a 50,000-barrel tank."

Some have made enormous strides in the further development of their particular methods and have been richly rewarded. Critics must concede that amongst drilling companies great differences in efficiency exist.

The drilling of wells to increased depths places the drilling profession in a more hazardous situation than that of the geophysicist. A slight mishap will junk the entire well. Often the setting of the wrong type of screen, insufficient cores upon entering sand, overloaded drilling solutions, etc., prevent the making of wells.

Often companies assume drilling obligations on a prospect prior to receiving geophysical reports on same. Sometimes a dome is found just beyond a few thousand feet or possibly to one side or the other of the previously located test well. Without carefully reviewing the history of such a well critics put the blame of the well's failure onto the geophysicist.

Sometimes land lines, inaccurate maps, misplaced well locations due to inaccuracies on the part of the engineers, and natural boundaries such as lakes and rivers cause the placing of a test well at the disadvantage of the geophysical prospect.

Furthermore, short termed leases or options have caused helter-skelter work on the part of geophysicists which at best could only find a most simple form of structure or a generalized picture. Time is necessary for all good things to transpire, even good geophysical work.

Conclusion

Critics must concede remarkable accomplishments by successful geophysical methods. Reputable geophysicists have as a whole been cautious in making reports. However, there have ben times when a company was willing to develop some peculiar anomaly not falling under the category of known geophysical structures. These must be regarded as experiments and not thrown up to the geophysicist as blunders.

Differences in opinions and differences in methods of interpretation have caused disagreements as to geophysical discoveries. This, however, is the case in all exploratory work and is not peculiar to geophysics. As a whole, geophysicists have an enviable record. In fact, geophysicists set about to spoil the oil profession by producing such fields as Sugarland, Port Neches, Van, etc., with initial well production. Hence the disappointment when other areas do not produce with the first well. Give geophysics time and it will richly reward the patient considerate operator. It must be remembered that some form of geophysical picture can be had of any area. Should the time come for oil production from sand conditions other than our present structures, even then the geophysicist can give an interpretation from his more detailed work of an area. All in all, things are not so bad with geophysics, and critics had better withhold their opinion until more time has elapsed. They should be patient enough to give half as much time for the thorough testing of the geophysical anomalies as was accorded other previously discovered structural conditions.

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Eastborough Has Good Prospects With Two Formations

THE Eastborough pool is an exceptional spot because of two things. It is the only new area in Kansas to find commercial production in both the chat and "Wilcox" horizons and the only pool with any appreciable amount of production that is finding a steady outlet for every barrel of oil it can produce. There has been no proration agreement and with 7500 to 10,000 barrels of pipe line outlet it is not likely that production will be restricted if a conservative drilling campaign is adhered to.

The pool is located in Township 27 south, Range two east, approximately one and one-half miles east of the city limits of Wichita. Production is limited to Sections 19 and 30 with development extending westward one location into Section 25 and northward into Section 18.

E. W. Marland, Incorporated, Mackey 1, SEc NW SW Section 30-27s-2e, the discovery well, was commenced June 19, 1929, and completed in the chat at a total depth of 2970 feet on August 30, 1929. This completion attracted little attention due to the fact that its initial production was only 65 barrels and the area was not further tested until Fisher and Lauck spudded Trustee 1, NEc SW SE Section 19-27s-2e, on October 29, 1929. This well was completed December 3, 1929, for an initial gauge of about six barrels per hour at a total depth of 2938 feet with top of the chat at 2929 feet. No further drilling was done until May 18, 1930, when Fisher-Lauck and Wheeler, Hagny Trust Company, commenced Trustee 2, SWc, SW SE Section 19-27s-2e. It was completed June 18, 1930, for an initial production of 60 barrels per hour and precipitated the present drilling campaign.

On August 15 there were nine completed wells having a potential of approximately 9000 barrels, six drilling wells, and 11 building rigs or rigging up.

With two exceptions, all drilling has been done with cable tools. One well was drilled to the top of the chat with rotary and standardized at that point. Derby Oil Company's E. B. Rimel 1, NW NE NE Section 30-27s-2e, is drilling with rotary combination. Only the top of the hole is dug with fishtail bits and practically all of the remainder requires the use of rock bits. About 20 days are required for actual drilling and wells are now being completed in approximately 30 days, at a cost of about $30,000.00. All cable tool rigs are using electric drilling power. Two 20-50 horsepower, 50-60 cycle, 440 volt, three phase electric motors drive to a common shaft.

Vickers Petroleum Company's Keys 1, NE NW NE Section 30-27s-2e, is the only "Wilcox" producer, having had only a small amount of oil in the chat, but being good for 1200 barrels when deepened to the Wilcox horizon. Wells in this sector of the field are finding only small production in the chat and it is probable that most of those which are

RECORD OF COMPLETED WELLS AS OF AUGUST 15, 1930

Section 19-27s-2e

Operator—	Farm	Well No.	Location	Derrick Floor Elevation	Top of Kansas City Lime	Top of Chat	Top of Wilcox	Total Depth	Initial Production	Water Size	String Length	Oil String Size	Oil String Length
Fisher & Lauck	Trustee	1	NEc SW SE	1348	2452	2927	....	2938	6 Bbls per hr.	8¼"	2700	6⅝	2927
Derby Oil Company	Eastborough Est.	1	SE SW NE	1360	2494	2949	....	2961	850	8¼"	2750	6⅝	No rec.
Fisher & Lauck	Trustee	2	SWc SW SE	1350	2485	2952	....	2973	60 Bbls. per. hr.	8¼"	2695	6⅝	2952
Derby Oil Company	J. D. Cloud et al	1	SE SE SW	....	2510	2984	....	3009½	1265	8¼"	2981	5 3/16	No record

Section 30-27s-2e

E. W. Marland, Inc.	R. J. Mackey	1	SEc NW SW	1340	2498	2958	....	2970	65	6⅝"	2753	5 3/16	2960
Blankenship Pet. Corp.	Schaffer	1	NEc N½ NW	1358	2475	2952	....	2970	2500	8¼"	2608	6⅝	2950
Fisher & Lauck and E. W. Marland, Inc.	Schaffer	1	NEc SE NW	1348	2493	2949	....	2961½	195	8¼"	2669	6⅝	No rec.
Vickers Petroleum Company and Hinkle	Keyes	1	NEc NW NE	1339	2475	2925	3238	3242	1200	6⅝"	2935	5 3/16	3187
Vickers Petroleum Company and Hinkle	Keyes	2	NW NW NE	1349	2480	2942	....	2978	271	8¼"	2600	6⅝	2942

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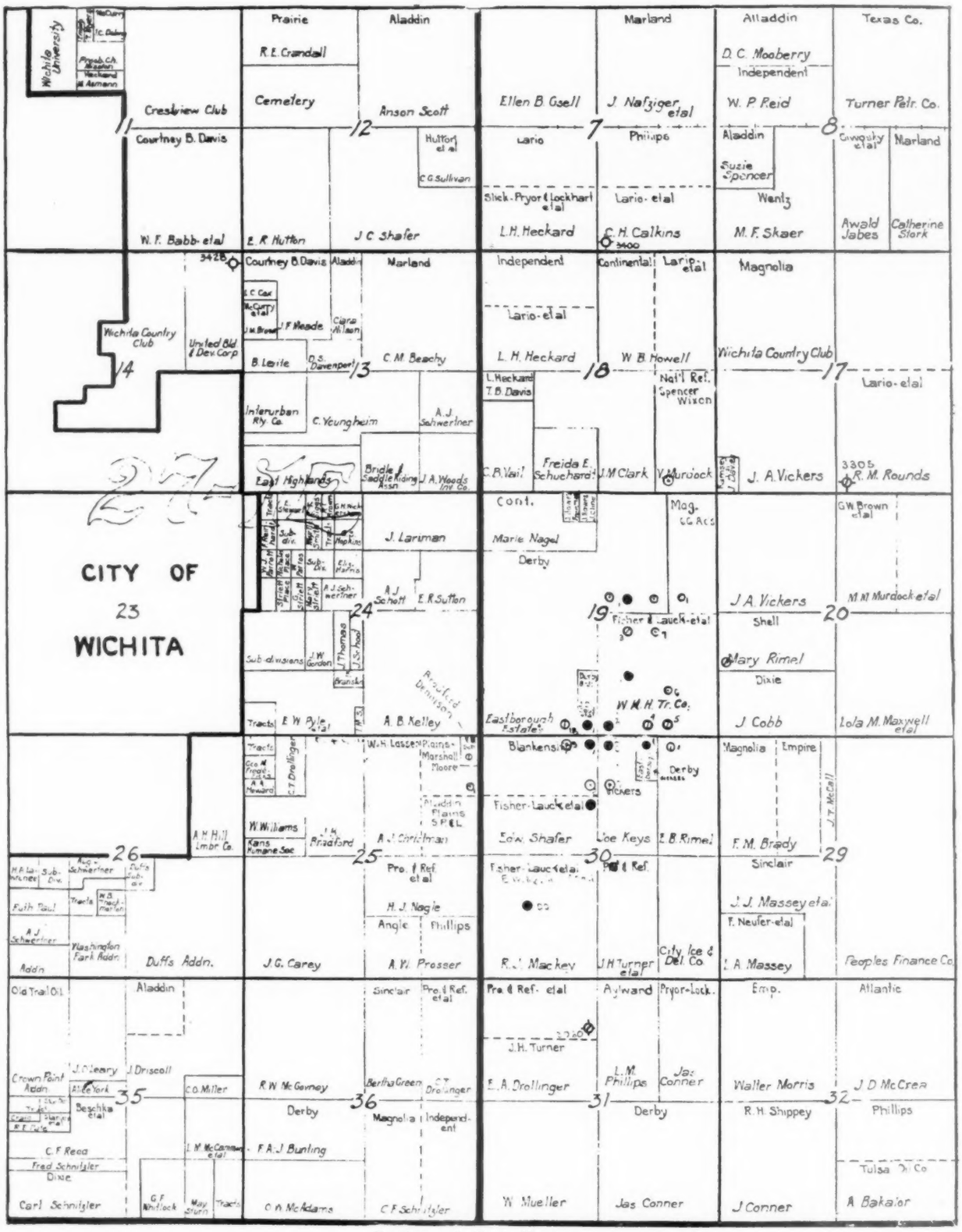
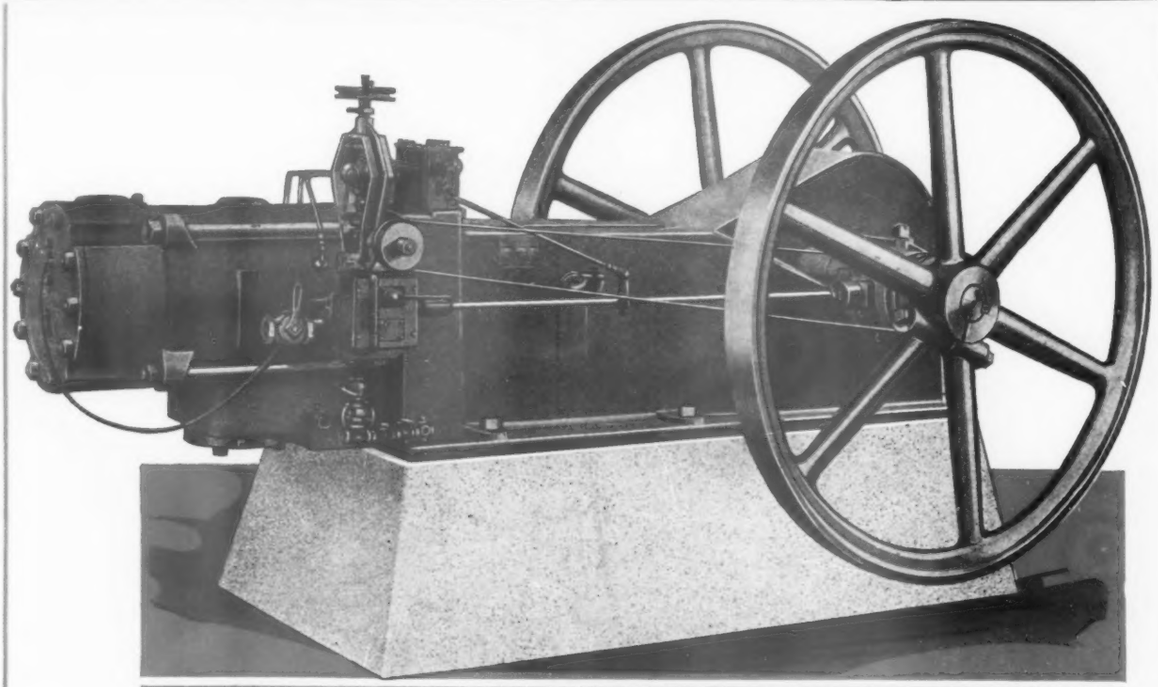
drilled with rotary tools will test this horizon with a formation tester and go on to the Wilcox.

The wells are being pumped with electric power using the same type of motors as those used for drilling. One operator, however, plans on installing gas engines. The oil is of exceptionally good quality, testing at high as 46.6 degrees corrected.

Not enough wells have been drilled to indicate the subsurface structure and nothing is known as to the probable extent of Wilcox production. It appears that the one well now producing from that formation might be located toward the edge of the Wilcox structure which, if true, would indicate the possibility of larger wells to the east and northeast.



Eastborough Pool, Kansas



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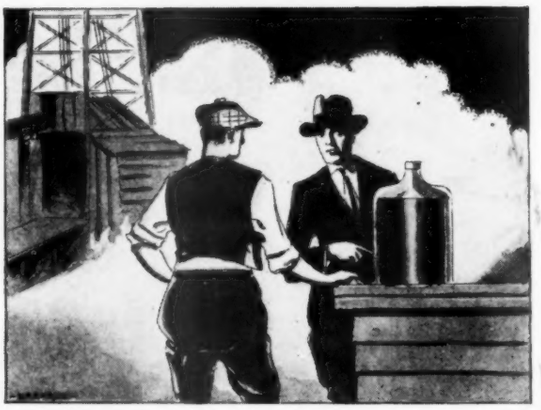

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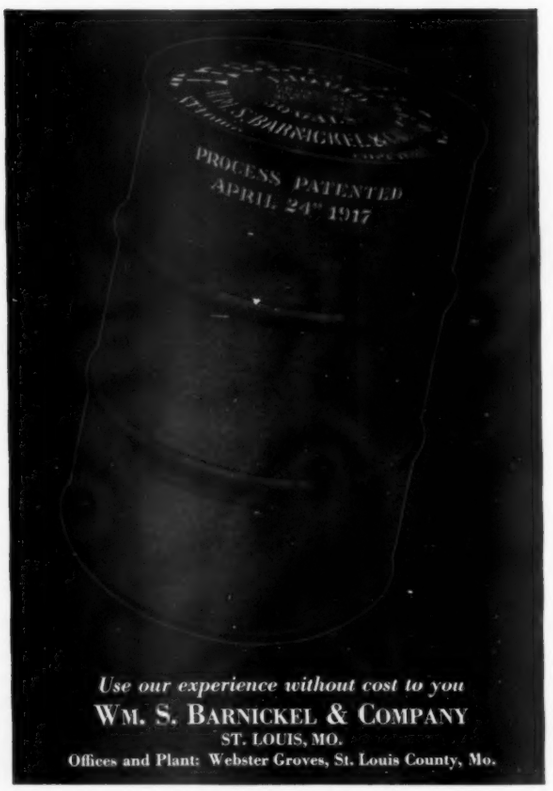
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Types of Oil Field Structures

By W. F. CLOUD
Associate Professor of Petroleum Engineering,
University of Oklahoma

GEOLOGIC structures favorable for the accumulation and concentration of oil and gas may be classified roughly into the following generalized types:

I. Anticline and Synclines
   (a) Large and remote anticlines
   (b) Alternating anticlines and synclines
   (c) Broad geanticlinal uplifts
   (d) Overturned folds
   (e) Lensing sands

II. Quaquaversal (Dome) Structure
   (a) Anticlinal bulge
   (b) Salt domes
   (c) Domes caused by volcanic plugs and necks.

III. Monoclines
   (a) Simple type
   (b) Monoclinal nose
   (c) Structural terrace

IV. Contacts of Igneous and Sedimentary Rocks

V. Unconformities

VI. Fissures, Joint Cracks and Channels

VII. Sealed Faults
   (a) Faulted anticlines
   (b) Faulted monoclines

Anticlines

Intensive lateral compressive forces when applied to sedimentary rocks; such as limestones, sandstones and shales, cause buckling and folding of the strata. The crests of the folds are called anticlines, as shown in Figure 1 at (a) and (b). The troughs of the folds are called synclines, as shown at (c).

The two sides of the fold which are called the limbs of the anticline dip away from the crest-line, or axis of the fold. Such folds vary from broad and gentle arches, as are found in many of the oil fields of Kansas and northern Oklahoma, to steep-dipping and overturned folds, as are found in some of the oil field structures of California.

If both limbs of the fold or anticline dip at approximately the same angle, the structure is said to be symmetrical, as shown at (d) in Figure 1; whereas, if one limb has a steeper dip than the other, the term asymmetrical is applied. However, symmetrical anticlines are rare. Furthermore, the axis is rarely if ever straight, but is usually curved in one or more directions.

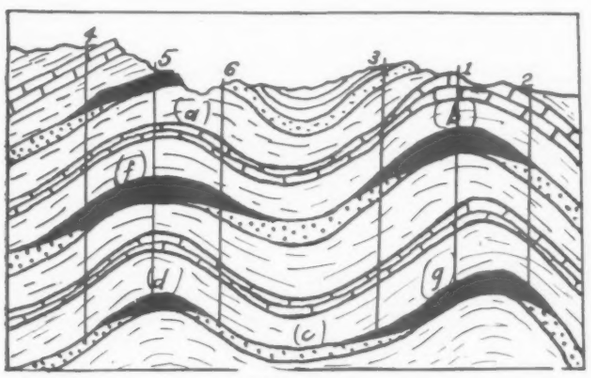

FIGURE 1

Anticlinal structure is often clearly defined at the surface. In fact, many oil fields have been discovered as a result of geologists being able to "map" surface closure. However, the crest of an anticline of fold is often absent, due to the effects of long periods of erosion, but the dip and strike of the strata are usually traceable. This condition of erosion and reversal of dip is shown in Figure 1, where wells 5 and 6 are located.

It has been learned from a study of subsurface conditions encountered in many oil fields that the amplitude of the folds usually increase with depth (see Figure 1). Also, they may shift to the right or left as the depth increases. This is the reason why so many wells that have been drilled on the top of the structure as it appeared at the surface failed to produce as well as those drilled farther down on the side of the surface structure. As, for example, in Figure 1 in the area where wells 1, 2 and 3 were drilled and also on the fold where wells 4, 5 and 6 were located, shifting of the folds and increase in the angle of dip as the depth increased have been instrumental in the unexpected production obtained, as portrayed by the drawing.

The most prolific production is usually obtained on the basinward side of an anticline, as the strata on that side usually dip at a lower angle and thus afford a larger area over which the accumulation of oil and gas may be concentrated. This condition is illustrated in Figure 1 at (f) and (g). Furthermore, oil will not readily migrate up dips that are very steep.

Lenticular and Shoe String Structure

When long but rather narrow oil-bearing strata are encountered in shale deposits, the producing sand is said to be a lens structure.

Sand deposits usually are seen to occur in comparatively shallow water; that is, along the shores of bays and lagoons, where the grains are subjected to much shifting and crossbedding before they become permanetly lodged offshore. In the course of this deposition and shifting bars, lenses and fans and cones are formed. Further depositions of relatively fine-grained material; such as clays and silts containing organic matter, may leave the bars and lenses embedded in what is apparently one continuous, fairly well-defined shale stratum. The shape of such coarse deposits is usually anticlinal, although no folding may have occurred. "Stray sands" is a term often applied to such deposits.

Another form of modified anticlinal structure quite similar in nature to lens structure is the "shoe string sands" or stream channel deposits of Anderson and Linn Counties in Kansas. (1) These unusual sand bodies lie in what were apparently sharply cut stream channels in the Cherokee shales. Their thickness may vary from 20 to 100 feet, and

while they are rarely over a half-mile in width, their length in some cases can be traced for 12 or 15 miles.

Synclines

Generally speaking, synclines are never considered as favorable structures for the accumulation of oil and gas. However, there are several conditions often encountered in oil sands which may cause oil to concentrate in synclines or basins.

In oil fields where the major pool is large and is composed of alternating anticlines and synclines of more or less local extent, oil is often found in the synclines as well as on the anticlines. This is especially true if the folding is gentle and the per cent of saturation in the sand is high. Oil has been produced from the synclines of the overturned folds encountered at McKittrick, California. Also, if oil sands carry no water, oil will accumulate in synclines. This was the condition at Venango, Pennsylvania.

Domes

Anticlines with very short axes are called domes. The length of the axis may be two or three times as long as the transverse diameter of the dome, or it may be nearly equal to it; but domes are seldom very circular in basal outline. The strata dip off in all directions from a crestal point, and therefore the oil may migrate from all directions over the entire surrounding area toward such a structure.

Such structures may be very pronounced, with steeply-dipping sides, or they may be low and rather flat. Noses and terraces are often associated with dome structure. Domes are often superimposed upon large irregular anticlines.

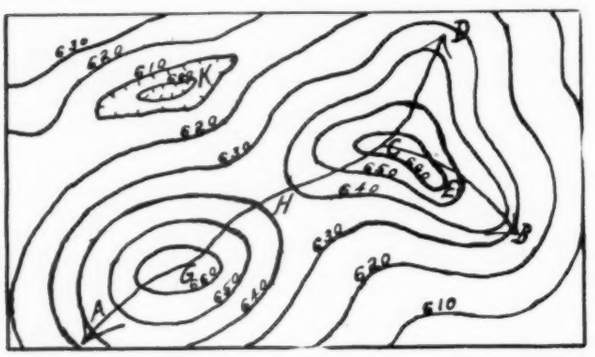

FIGURE 2

Figure 2 shows a subsurface contour map of anticlinal and dome structure common in producing oil sands. The major axis trends in the direction of A-B, but it splits off at "C" in the direction of "D" to form a "nose." Terrace structure is shown in the area of B-E. Depressions similar to the type shown at "H" are called "saddles." A syncline is shown at "K," "C" and "G" are domes superimposed upon the anticline.

The origin of domes is rather difficult to explain. They may be the result of the intersection of two or more anticlinal folds, or they may be due to local variations in dip on the limbs of very large folds. Sometimes they are formed by pressure from below. This may be due to two principal causes: (1) by the great force often exerted by intrusive igneous masses, as is well illustrated by the prolific oil horizons of Mexico; and (2) as a result of pressure developed by intrusions of great plastic cores of salt. The salt dome fields of the Gulf Coast of Texas and Louisiana are examples of the latter.

Salt Domes

Salt domes have been responsible for the accumulation of oil and gas in the Gulf Coast fields and in Russia and Roumania. In the Gulf Coast area production has been obtained adjacent to approximately 75 salt domes.

The salt deposits, whether they were caused by the upward migration of plastic salt along fractures in the rocks or by the expansive force of growing crystals of salt upon solidifying, having been responsible during their intrusion or accumulation for considerable upward pressure. This has resulted in the doming of the overlying sedimentary rocks, as well as in folding the rocks upward adjacent to the salt. It is believed that some of the strata adjacent to the edges of the salt have been folded upward 200 feet or more within a depth of 4500 feet.

FIGURE 3
a = Saltcore; b = Dolomite; c = Gypsum

The salt does not extend to the surface, but is encountered at depths ranging from 600 to 1600 feet below the surface.[2] This condition, together with the customary associated oil deposits, is shown in Figure 3. The oil is not found in the dome-shaped salt cores, but is found in the gypsum and dolomitis limestone beds often found above them, and especially in the sedimentary rocks which surround the salt cores on all sides, as shown in the drawing.

In the Gulf Coast area the adjoining country is practically flat. As a result, the details of structure are best derived from a study of well logs. At many places smooth mounds or hills rise slightly above the generally level plain. On some of the low hills there once were shallow lakes from which gas bubbles escaped. This often constituted about the only direct surface evidence of the existence of petroleum.

In Roumania plugs of salt have been literally thrust upward through clays and sandstones, the oil sands being sealed-off above by the central salt mass itself. Such intrusians have left the sedimentary clays and sands dipping away from the central mass at high angles. As might be expected, local faulting has occurred adjacent to such salt dome structure, and the entire area has been intensely folded.

Monoclines

Monoclines are structural features wherein the strata dip in only one general direction, as is shown in Figure 4. There may be certain minor folds and slight reversal of dip at various intervals on a large monocline, but the dominating trend of the strata is in only one direction.

There are two general types of monoclines, classified as to origin: (1) those that are developed as a result of erosional effects upon the crest of an anticlinal fold, as is shown in Figure 4; and (2) those that owe their origin to major mountainous uplifts which occur after the deposi-

(1) Rich, J. L.—"Shoestring Sands of Eastern Kansas," A. A. P. G. Bulletin, Vol. 7, Also in Vol. 10.

(2) Recent explorations with geophysical instruments indicate that in instances the salt plugs are much deeper. At Sugar Land, in Fort Bend County, Texas, top of the salt was found at about 3200 feet, and at Danbury, Brazoria County, salt was struck below 5000 feet, believed to be near the top of the dome.—Editor.

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I.D. Unexpanded	1 7/8	1-9/16	2 7/8	2 7/8	3 7/8	3-1/16	4 1/4	4 1/4
O.D. Unexpanded	3 1/2	3 1/4	4 7/8	6 1/4	6 3/8	6 5/8	6-15/16	7 1/4
O.D. Expanded	4 1/4	4 3/4	6-5/16	7	7 3/4	8 1/2	8 7/8	9 1/4
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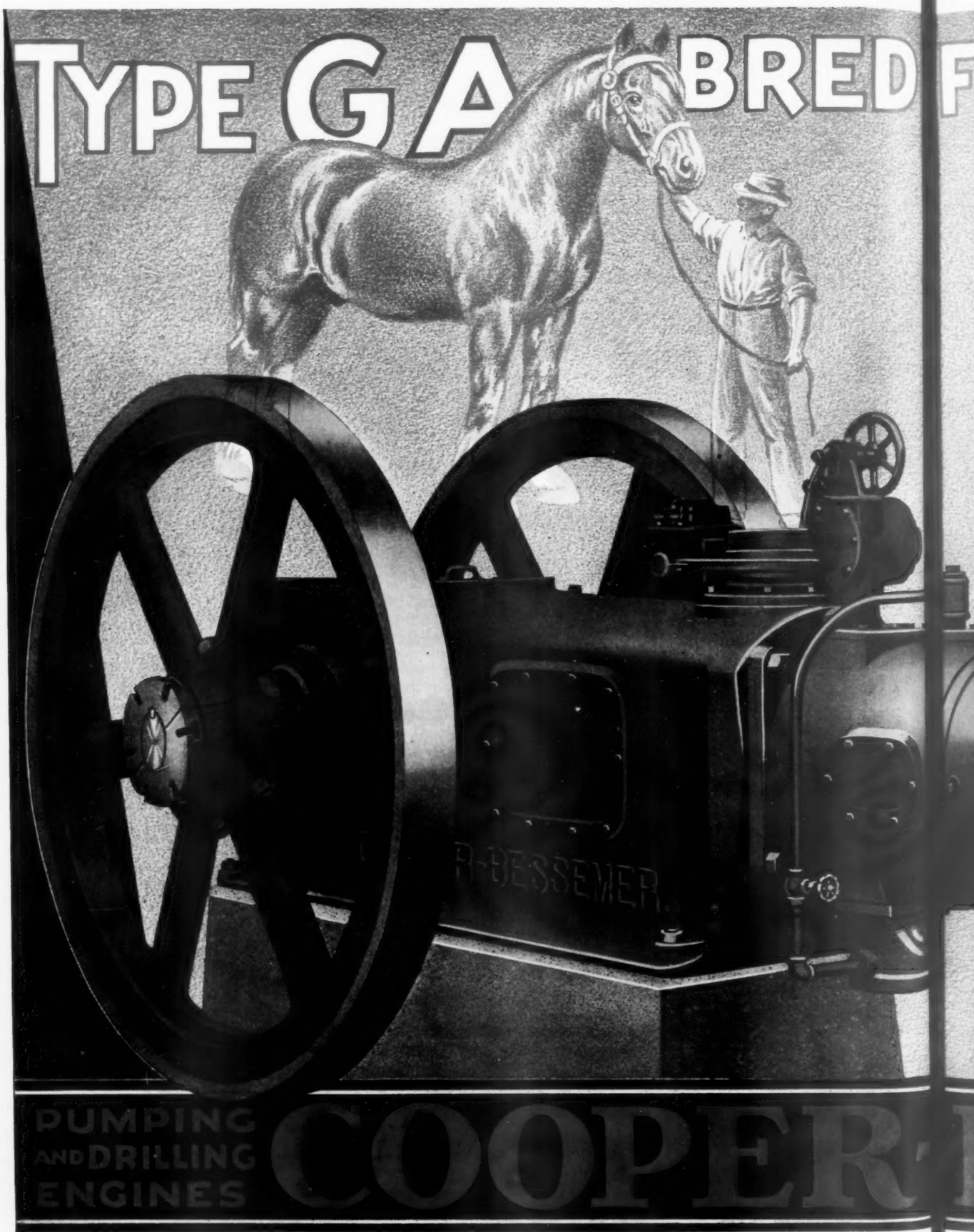
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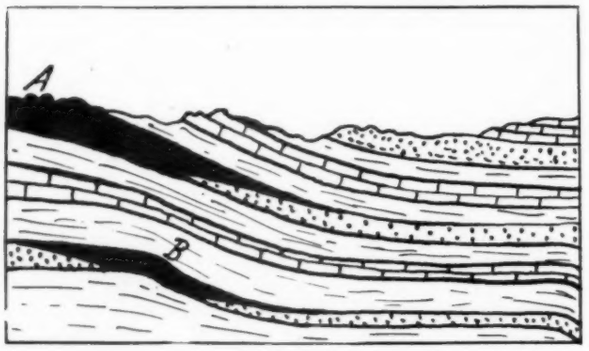

FIGURE 4

tion of the sediments which compose the strata associated with the monocline. As an example of the latter, in Northeastern Oklahoma several long, low-dipping monoclines exist which were tilted to their present position by the Ozark Uplift. These monoclines extend westward and southwestward possibly as far as 150 miles.

When monoclines are formed by the eroding away of the crest of an anticline, a partial cross-section of the strata composing the fold will be exposed at the surface. If one or more of the outcropping strata is porous enough to contain oil, its presence may be made evident by accumulations of dark, bituminous materials and asphaltic residues along the outcrop, as shown in Figure 4 at "A" and in Figure 1 where well No. 5 was drilled. When locating a test well on such monoclinal structure, care must be used so that the well is far enough down the flank to penetrate the oil sand below such oil seeps and bituminous outcrops in order to obtain the better grade of oil and the most prolific production.

Terrace structure is often the cause of accumulation of oil and gas on monoclinal folds. In this case, a change or reversal of dip on the monocline will form a kind of "trap," and the oil and gas will accumulate at that place, as is shown in Figure 4 at "B."

Contacts of Igneous and Sedimentary Rocks

Igneous rocks never serve as a reservoirs for oil and gas, but their intrusion upward into the overlying sedimentary rocks often tilts the strata and forms ideal structural "traps" in which oil and gas may accumulate. Occasionally such crystalline intrustions may reach the surface.

Oil and gas have been known to be associated with igneous intrusions in Cuba, on the eastern flanks of the Andes mountains in Argentina, in Egypt and Palestine, in Ontario, in Mexico, and in the Texas Panhandle where the "granite wash" is underlain by a solid granite ridge. The buried granite ridge of Kansas is another structural feature that has been responsible for the accumulation of commercial production.

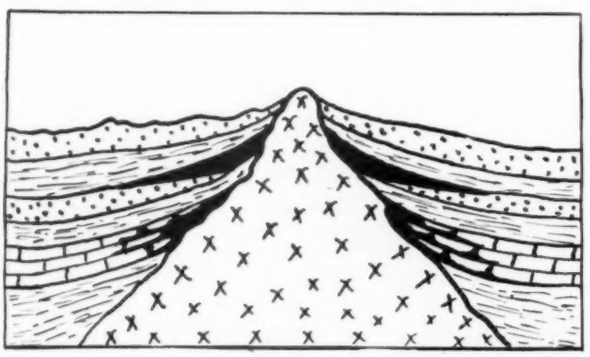

FIGURE 5

Intrusions may have varied shapes and sizes, depending upon the nature and amount of molten rock, the amount of heat present at the time of the intrusion, the expulsive force of the molten mass, the weight and thickness of the overlying sediments, and the number of cleavage and fracture planes along which the lava may migrate with least resistance. If the liquid rock is forced into fissures and fracture planes and solidifies there, dikes and sills or laccoliths are formed. If the lava solidifies in chimney-like passages, pipes or plugs result.

In the Tampico-Tuxpam field of Mexico oil accumulations are found in areas where plugs and dikes cut across petroliferous strata. These strata have been folded upward at the contacts with these intrusions, thus forming anticlinal or dome structure into which the oil has migrated until it was "trapped" against the igneous mass or core. Figure 5 is typical of the concentrations of oil and gas near igneous intrusions in Mexico.

Unconformities

During various stages in the geologic history of an area stream deposition may be interrupted by folding and uplift, followed by a long period of erosion, after which the area may again be submerged and subjected to deposition. This results in the deposition of younger sediments upon and above the older folded and eroded strata. Such a condition would result in separate and distinct series of strata that have a discordant relation to each other, their dips being in different directions and of different degrees, and each series belonging to an entirely different geologic age, the lower series being the older. Such a relationship in the strata of the earth is known as an unconformity (see Figure 6.)

FIGURE 6

Unconformities frequently serve as structures favorable for the accumulation of oil and gas if the underlying older strata are porous and the source rocks for the formation of oil are present. The oil will migrate up favorable dips in the older formations until it reaches the unconformable contact between the younger and the older strata. Here it may become sealed or "trapped" by coming in contact with impervious shales and clays at or near the base of the upper or younger series, thus providing a suitable reservoir.

In Figure 6 the unconformable contact is shown at A-B. The oil in sand "C" can migrate upward and saturate the coarse sand "D," but farther migration upward or laterally is prevented by the impervious strata, "E" and "F." It is apparent from the drawing that the surface outcrops in

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such an area might be synclinal, and therefore be considered unfavorable for finding oil.

Generally speaking, unconformities are not discernible or readily interpreted at the surface. Many producing areas can be cited where the surface rocks are much younger than those beneath the unconformity, and lie nearly flat or

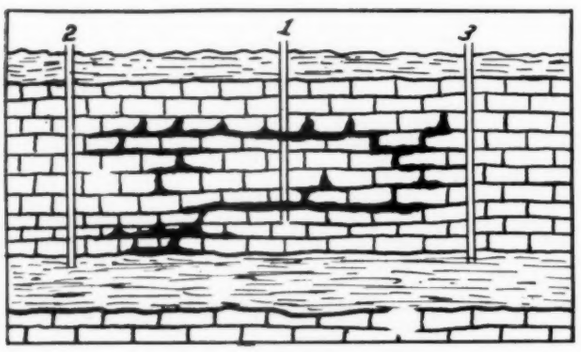


FIGURE 7

synclinal, thus portraying no surface evidence of favorable structure. Since unconformities are uncertain or their presence unknown, and if known to exist are often exceedingly difficult or quite impossible for the average oil operator to decipher, it is always best to have a reputable geologist study the subsurface conditions and possibilities of an area before locating a test well. From his knowledge of the age, trend, thickness, nature, and stratigraphic conditions present during the periods of deposition in certain areas, as compared to those of similar or neighboring areas, he can usually foretell the probability of the existence of unconformities and advise one as to the possibility of finding production in such structure.

Fissures, Joint Cracks, and Channels

Shales and clays seldom serve as reservoirs for oil and gas, and structures existing in them are very erratic and irregular. However, a few instances have been recorded where fissures, crevices, and joint cracks have developed to admit the migration of oil. The structure is usually monoclinal, but is very irregular in outline and often not mapable. Production is not encountered in any particular trend or series of beds in the shale. However, the fractures and fissures often extend parallel to the bedding planes. Wells that strike the major joints or fissures must be considered as individual pools, as the isolated fractures are seldom wide enough in extent to accommodate more than one producing well at the same depth.

The production obtained at Katalla, Alaska, comes from fissured shale beds tilted at high angles (3). At Salt Creek, Wyoming, some sensational but short-lived wells have been completed in crevices in the shales encountered above the First Wall Creek sand (4). At Florence, Colorado, small producing wells have existed for a number of years (5). The structures (fissures) follow more or less irregular trends in this field, making it somewhat possible to do a little geologic work in advance of drilling. The fissures here occur in the Pierre shales.

Jointed and channeled structure is more common in limestone and dolomites than in shales. Calcium carbo-

(3) George, H. C.—"The Alaskan Oil Fields," Engineering & Mining Journal-Press, Dec. 1922.

(4) Emmons, W. H.—"Geology of Petroleum," McGraw Hill Book Co., New York.

(5) Washburne, C. W.—"The Florence Oil Field, Colorado," United States Geological Survey Bul. No. 381, 1910.

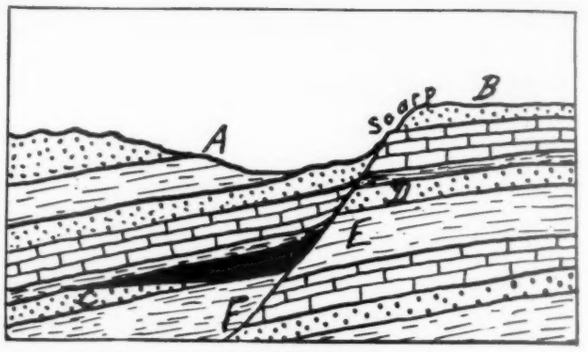


FIGURE 8

nate, the principal chemical present in limestone, is quite soluble in water. Percolating underground waters, following the trend of joint planes and cracks in the limestone, often dissolve out and carry away large quantities of calcium carbonate, leaving open channels and fissures of irregular structural trend into which oil and gas under pressure may migrate and accumulate later. Figure 7 illustrates characteristics common to limestone and dolomite production. Well No. 1 is a prolific producer from two "breaks" in the same limestone series; whereas, wells No. 2 and 3 must be "shot" before they will produce.

The two most prolific and well-known producing limestone horizons in America are the Tamasopa limestone of Mexico and the Arbuckle (Siliceous) limestone of Oklahoma.

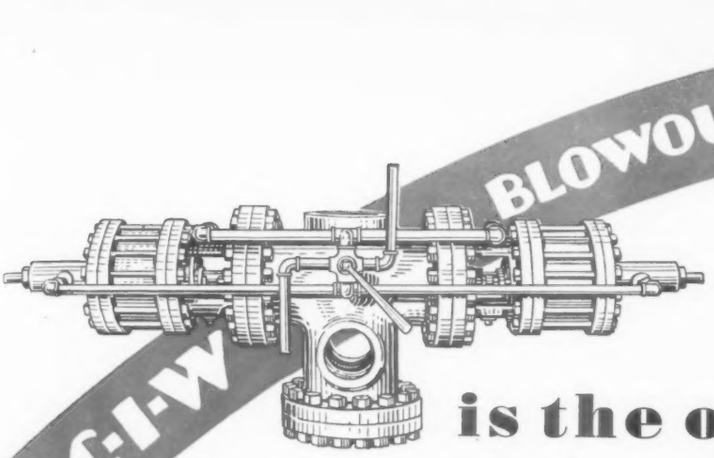
Faulted Anticlines and Monoclines

In many instances detailed study of the subsurface relationships of oil fields has proven that faulting associated with both monoclinal and anticlinal structure has been responsible for the accumulation of the oil and gas found.

A fault is a displacement of the earth's crust along opposite sides of a fracture plane or surface. The surface along which the vertical and horizontal movements have occurred is called the fault plane (see Figure 8 at "F"). In areas where faulting has occurred, the plane often leaves a topographic irregularity or break on the surface relief. This may have the form and appearance of a cliff, and is known as the fault scarp (see Figure 8). It is often the only direct surface evidence that faulting has occurred.

In the case illustrated, side "A" is called the downthrow side, and has moved downward with respect to side "B." The fault plane has intersected and displaced an oil sand "C" to the extent that farther upward migration of the oil in the sand is prevented because the porous sand containing the oil is resting against the impervious shale "E" in such a manner as to form a structural "trap" for oil. However, unless the fault plane in consolidated strata is well sealed with finely-ground earthy material called "gouge," the oil may migrate along the fault plane itself, and thus not be concentrated in a pool, as shown. Wells drilled on the right of the fault plane will find the sands devoid of oil, as it is apparent that the same sand will be barren at "D" on the upthrow side of the faulted area.

Faults that develop on anticlines are subject to the same conditions as are illustrated here on the monocline. However, thrust faulting is more commonly associated with anticlinal folds than with monoclines.



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WORLD PETROLEUM IN REVIEW

Sydney, Australia.—Reports of Queensland Department of Mines have given considerable importance to oil interests in the Sprinsure district. Geological indications point to favorable formations containing oil and have been considered worthy of further investigation. Plans have not been announced yet regarding exploration of these prospects.

Bucharest, Roumania.—New policies to restrict production and discharge men as recently adopted by the various oil companies has led to workers firing many of the numerous plants and destroying property in the Mislea oil fields.

Mexico City, Mexico.—Plans for a pipe line from the Furbero field to this city have been announced by the British Eagle Oil Company. The line will be a little over 140 miles long.

Wellington, New Zealand. — The New Plymouth area which has produced over 36,000 barrels of oil is again receiving attention as a potential oil producer. Developments in the past have been held up because of the lack of efficient field equipment. Previous failures were not due to lack of presence of oil but to lack of proper equipment for handling the wells. Four new companies are starting operations in the field and are planning to use percussion plants for developing the promising prospects.

Maracaibo, Venezuela.—Venezuela Gulf will drill a wildcat for California Petroleum Corporation, subsidiary of The Texas Company, in the Miranda district, State of Zulia. This well is to be a test that will probably develop the territory between the location and the present producing field at La Rosa.

Bogota, Colombia.—Crude oil production of International Petroleum Company, Ltd., in Colombia and Peru during the first six months of this year averaged 84,357 barrels daily, an increase of 124 over first half of 1929. Shipments of crude oil from these two countries averaged 66,863 barrels daily during the first half, an increase of 5070, compared with the same period of last year.

Mexico City, Mexico. — Crude oil production in the Panuco and Tuxpam districts for the week ended August 2 averaged 90,000 barrels daily, compared with 87,143 barrels a day in the previous week.

Mexico City, Mexico.—Sinclair Consolidated Oil Corporation's purchase of Pierce Oil Corporation interests in this country promises renewed activity in drilling operations and indicates confidence of purchaser that Mexican oil legislation will permit satisfactory working of undeveloped sections by foreign companies. As opportunity permits Sinclair will exploit intensively the Tamaulipas, Panuco and southern oil fields.

Brussels, Belgium.—Recent changes in import duties have caused a reduction of the duties on gasoline of about eight per cent. An excise tax has been established on all gasoline refined in Belgium.

Panama City, Panama.—Gulf Oil Corporation has formally abandoned its search for oil on the Isthmus of Panama as fruitless and has asked for a cancellation of its concession in the province of Darien, granted in 1923. Sinclair Consolidated Oil Corporation remains as the only other oil-seeking concessionaire, but it has slowed down operations. It is estimated that the two interests have spent $1,000,000 in their oil exploratory work on the Isthmus.

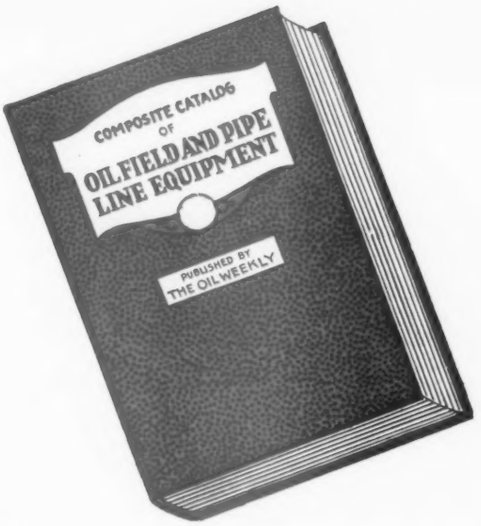
Moscow, Russia.—The largest gusher struck during the last two years in Baku field was brought in the latter part of June for an initial production of 62,000 barrels of pure oil from a depth of 3100 feet. This gusher is well No. 132 on Plot 6 at the old fields of Bibi Eibat. Production for the first six months of 1930 for this country has been estimated at 47,765,000 barrels, an increase of about 12 per cent.

Mexico City, Mexico.—President Rubio has issued a decree to the Ministry of Industry, Commerce and Labor and the Administrative Control of National Petroleum that a thorough study must be made of the various cases and ascertain the legality of all cases before granting concessions or contracts for any portion of the national petroleum reserves. The decree supplements the presidential measure of November, 1928, giving the general basis for granting oil concessions and stipulates that all such concessions must have approval of the president.

London.—A meeting of the British authorities and Mesopotamian statesmen to be held here within the next few weeks will determine England's new standing in developing oil territory in Iraq. The English and American groups in the Iraq Petroleum Company, organized as an international oil company after the war for holding concessions and developing oil properties in the Iraq, have been in favor of withholding development until there was need for crude supplies from this territory. The French group alone has been anxious to hasten the development of the Iraq fields.

Praha, Czechoslovakia.—Recent reports on important statistics show Russia to be the leading country in importing petroleum to this state. The principal source of imports of all petroleum supplies has been Russia and the United States, together with imports from Germany, Italy, Poland and Roumania. The natural resources of this country do not justify the great amount of petroleum imports, but due to lack of consistent development it has been necessary to have other sources of supply to supplement the 100,000 barrels of crude produced annually in this country.

Windhoek, British S. W. Africa.—Message from Middleburg, Cape Province, states that oil indications have been found in formation known as the Beaufort Beds. Samples of this oil submitted to government analysts were found to be a true mineral oil. "The discovery of mineral oil in the Beaufort Beds is a new one, and in importance equal to the other world-known occurrences, such as in ridges running along the base of mountain ranges and domes on the flats." The first oil was struck at 170 feet, and at 233 feet the bore passed through two further beds of oil, when drilling was suspended.



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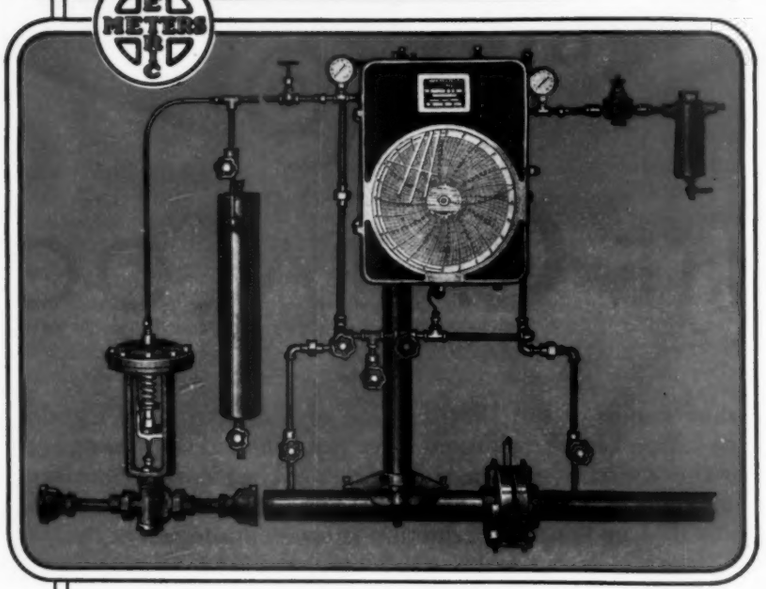
METRIC Rate-Volume Controller

a Dozen applications indicate the wide range of important uses



THE Metric Rate-Volume Controller has been built solely to meet the problems in refining and in natural gasoline plants. The object has been to make constant control of *volume* as certain and as satisfactory as constant *pressure* control has been made by the use of the best designs of regulators.

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4. Controlling amount of steam used in steam still.
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AND NATURAL GASOLINE PLANT APPLICATIONS . . .

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2. Controlling rate of flow of gas sent to the absorbers.
3. Controlling rate of flow of oil to the still.
4. Controlling rate of flow of lean oil from the still.
5. Controlling rate of flow of steam to the still.
6. Controlling rate of flow of oil charge to kettle in gasoline stabilization.

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Markets--Production--Crude Prices

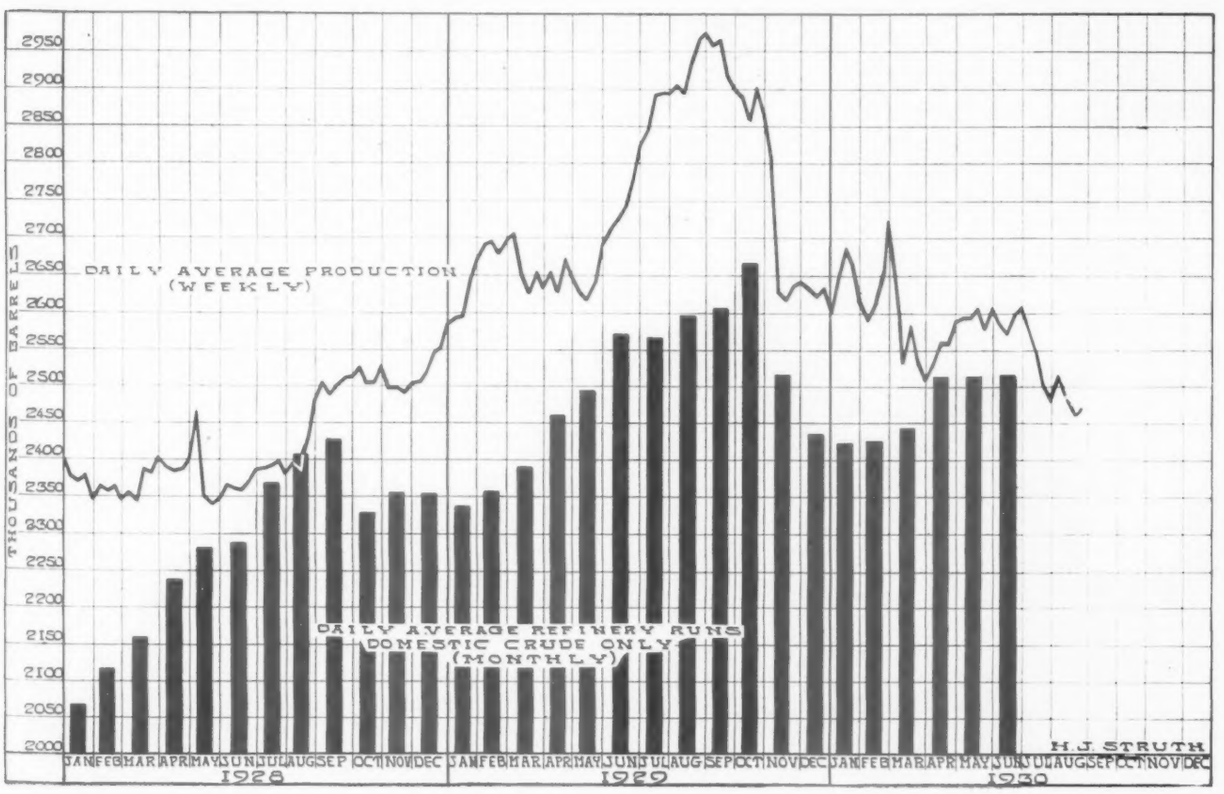
H. J. STRUTH, *Staff Economist, Houston, Texas*

Texas Production Curtailment Aided by Decline

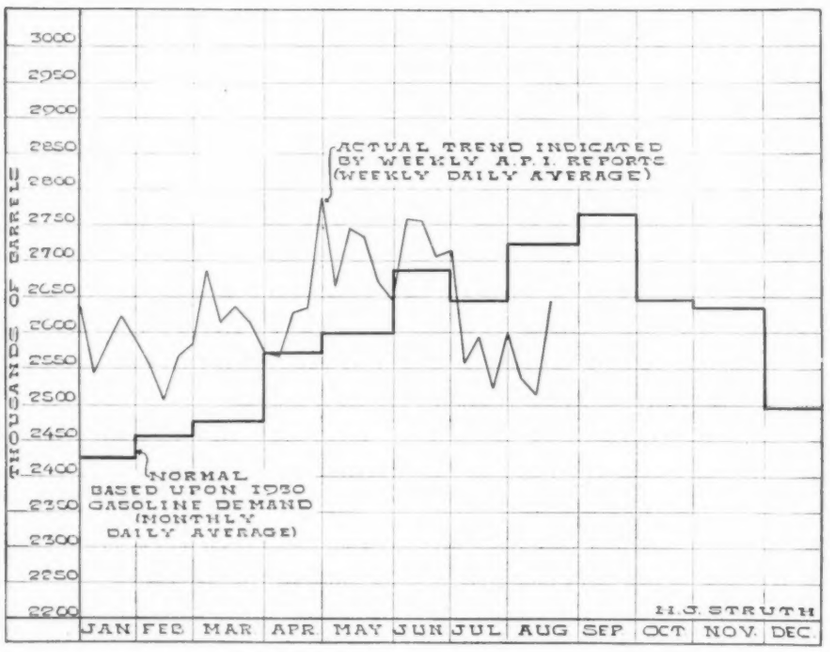
TEXAS crude production for the week ending August 23 registered a decline of 15,950 barrels a day. In view of the fact that proration was placed in effect on August 27, whereby the state allowable production was placed at a maximum of 775,000 barrels daily, it is seen that this substantial decline prior to that date is a distinct aid to curtailment activities. As a result of revising the production limit figure to 775,000 barrels, last week's actual production in Texas only constituted an excess of 41,250 barrels daily. Providing that proration plans now in effect are carried out in all areas outside of the Gulf Coast, barring unforeseen obstacles in the form of legal proceedings, it is apparent that practically little difficulty should be experienced in bringing about the additional reduction indicated as excess.

While the daily average production of crude oil in the United States for the week ending August 23 showed a slight gain of 6950 barrels, returns from Texas, outside of the Gulf Coast, Arkansas, California and Eastern States indicated substantial declines. These were more than offset, however, by a gain of 28,750 barrels in Oklahoma and a gain of 12,250 barrels in the Rocky Mountain area. Total daily average for the United States last Saturday, August 23, amounted to 2,470,500 barrels. Under the revised proration schedule for Texas, as outlined by the railroad commission on Tuesday, August 26, limiting

DOMESTIC PRODUCTION AND REFINERY RUNS



RUNS OF CRUDE OIL TO STILLS



production of the state to 775,000 barrels beginning August 27, the total daily average excess production of the United States last week amounted to but 101,893 barrels. With Oklahoma and Texas forces aligned in the direction of controlled production it is possible that this excess figure will be materially reduced within the next few weeks. In fact, these two states could easily bring the excess figure down to less than 50,000 barrels for the United States.

Texas remains the only serious factor in the over-production situation of the country, but it is believed that the forces now at work will improve the situation there within a short time. It is apparent, however, that it will be difficult to attain the desired production limit, as the meeting held in Austin on Monday, August 25, emphasized that there is strenuous opposition to state-wide curtailment. The experiment now being tried in the Gulf Coast, whereby all unnecessary drilling will be eliminated and all new wells brought in will not be allowed to produce more than 500 barrels daily, will undoubtedly arouse keen interest from all sections of the country. That production is staging a natural decline in the Gulf Coast is evidenced by the production figures of various fields there during the past few weeks. If drilling activities can be successfully checked in that area for 90 days, it is possible that production of this section will show a material decline in the near future. What effect this will have upon the market demand is another angle to the situation that can only be worked out as conditions present themselves. It looks like the movement to curtail drilling in the Gulf Coast is a sincere one and many eliminate the necessity of placing this area on a proration basis.

Air Gas Lift Blamed

One important phase of the railroad commission hearing held at Austin on Monday was the statement made by Underwood Nazro, of the Gulf Production Company, to the effect that the air-gas lift is perhaps mainly responsible for over-production in Texas.

Oklahoma producers have definitely adopted a production schedule of 550,000 barrels daily from the month of September. At the same time, Oklahoma City operators agreed to hold their output down to the figure necessary to meet the state limitation. As a result, it is expected that Oklahoma proration officials will be able to maintain production at present levels, or lower, until the end of September, when a meeting of operators will determine the course of procedure. The gain in Oklahoma's output

CRUDE RUNS TO STILLS, GASOLINE AND GAS AND FUEL OIL STOCKS, WEEK ENDING AUGUST 16, 1930

(Figures in barrels of 42 gallons)

District—	Potential Daily Capacity	Potential Capacity Reporting Total	Potential Capacity Reporting Per Cent	Crude Runs to Stills Total	Crude Runs to Stills Daily Average	Crude Runs to Stills Per Cent Operated	Gasoline Stocks	Gas & Fuel Oil Stocks
East Coast	608,700	608,700	100.0	3,454,000	493,400	81.1	6,198,000	9,995,000
Appalachian	128,100	117,600	91.8	605,000	86,400	73.5	1,382,000	1,087,000
Indiana, Illinois, Kentucky	382,500	381,000	99.6	2,106,000	300,900	79.0	6,419,000	4,355,000
Oklahoma, Kansas, Missouri	462,200	415,700	89.9	1,933,000	276,200	66.4	3,324,000	4,816,000
Texas	788,000	712,700	90.4	4,135,000	590,700	82.9	6,339,000	10,415,000
Louisiana-Arkansas	270,600	262,000	96.8	1,242,000	177,400	67.7	1,522,000	1,795,000
Rocky Mountain	148,900	139,300	93.6	443,000	63,300	45.4	2,237,000	1,215,000
California	897,400	891,400	99.3	4,021,000	574,400	64.4	13,831,000	105,481,000
Total Week Aug. 16	3,686,400	3,528,400	95.7	17,939,000	2,562,700	72.6	41,252,000	139,160,000
Total Week Aug. 9	3,686,400	3,528,400	95.7	17,063,000	2,437,600	69.1	42,729,000	139,242,000
The Total U. S. Figures for Last Year, Shown Immediately Below, are not Comparable with This Week's Totals because of Difference in Percentage Capacity Reporting								
Total August 17, 1929	3,339,700	3,105,900	93.0	18,743,000	2,677,600	86.2	*33,929,000	*139,579,000
The Texas and Louisiana Gulf Coastal Figures Shown Below are Included above in the Totals of Their Respective Districts.								
Texas Gulf Coast	526,500	526,500	100.0	3,097,000	442,400	84.0	5,087,000	7,421,000
Louisiana Gulf Coast	147,500	147,500	100.0	875,000	125,000	84.7	1,212,000	1,021,000

*Final Revised.

last week was due to a sharp increase of 37,500 barrels at Oklahoma City. Practically all other districts of the state reported decreased production. Kansas production is being held at present levels without difficulty, although there is still an excess of over 9000 barrels daily. As a result of last week's gain in Oklahoma, the production status of the state showed an excess over the prescribed limit of 16,950 barrels.

California Production Declines

California reversed its production trend last week when there was a decline of 12,600 barrels. Of this amount, the Elwood field contributed a decline of 10,000 barrels. The Playa del Rey field was listed by the American Petroleum Institute for the first time, showing a daily production of 12,000 barrels. While California seems to have the situation well in hand, some difficulties are being encountered, particularly at Playa del Rey and Venice.

The rapid increase in field activity at Venice and failure to reach an agreement on curtailment is viewed with alarm and trouble is brewing unless production is at least partially controlled. Field projects total more than 100 and new locations are being made at a rapid rate. Little is known of the possibilities of the field but a large number of completions over a short period of time could cause much trouble. Conflicting factors are working in the gasoline market, with the cut price tendency growing on one hand and an effort being made to post higher retail prices on the other. Claims are being made by certain independent refiners that a fair profit cannot be made on gasoline at 19½ cents in the Los Angeles territory, while many stations are answering the argument with 14½-cent gasoline. Marketers will do well to hold the present level of prices in the Pacific Coast territory. Export gasoline is moving at prices ranging from 6½ to seven cents on the netback. Light crude is being sold on spot sales at posted prices, with contracts bringing a shade above the regular schedule.

The industry in California has not recovered from the long period of over-production and the mere belief that everything is back to normal does not make such a condition true. Increases in Mid-Continent production affect California and the balance of national production must be maintained if the recovery is completed.

Crude runs to stills for the week ending August 23 aggregated 17,861,000 barrels or a daily average of 2,551,000 barrels. This represents practically little change over the preceding week when the daily average amounted to 2,562,000 barrels. Gasoline stocks on August 23 aggregated 39,842,000 barrels. This represents a further decline of 1,410,000 barrels, reflecting to some degree the increased demand as well as the curtailed refinery operations. As has been pointed out before, the refining industry must not lose sight of the fact that yields of gasoline from crude are constantly increasing, as a result of increased cracking facilities, and it is becoming more and more difficult to maintain control over the quantity of crude run to stills. Present runs are still too high, particularly when viewed in comparison with previous records. Since stocks of gasoline are more than ample to meet even extraordinary requirements during the balance of the motoring season, it is up to the refining industry to exert further effort in the direction of curtailed runs of crude to stills. Wherever possible, runs should be reduced to a figure that will result in a heavier draft upon gasoline storage. Any increase in

HOW LAST WEEK'S DAILY AVERAGE PRODUCTION COMPARES WITH NECESSARY AND NORMAL QUOTA LIMIT

	Necessary Daily Average 3rd Quarter 1930	Quota Limit Prescribed to Correct Previous Excesses	Actual Daily Average Week Ending August 23, 1930	Excess
Arkansas	62,431	62,431	55,050	—7,381
California	664,149	594,000	607,700	13,700
Kansas	120,222	105,554	114,650	9,096
Louisiana	60,116	58,749	68,300	9,351
Oklahoma	669,115	550,000	566,950	16,950
Texas	839,361	775,000*	816,250	41,250
Balance of U. S.	230,000	230,000	241,600	11,600
Total	2,645,394	2,368,607	2,470,500	101,893

*Limit set by R. R. Commission beginning August 27.

IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

(Barrels of 42 gallons)

	Week Ended Aug. 16	Week Ended Aug. 9
AT ATLANTIC COAST PORTS—		
Baltimore	81,000	388,000
Boston	.....	73,000
New York	1,006,000	818,000
Philadelphia	537,000	33,000
Others	182,000	105,000
Total	1,806,000	1,417,000
Daily Average	258,000	202,428
AT GULF COAST PORTS—		
Galveston District	.....	68,000
New Orleans & Baton Rouge	15,000	80,000
Port Arthur & Sabine District	.....	.....
Tampa	39,000	.....
Total	54,000	148,000
Daily Average	7,714	21,143
AT ALL UNITED STATES PORTS—		
Total	1,860,000	1,565,000
Daily Average	265,714	223,571
Daily Average Four Weeks Ended	278,607	288,071
Distribution of Total Imports is as Follows:		
Crude	1,509,000	957,000
Gasoline	85,000	293,000
Fuel Oil	266,000	305,000
Total	1,860,000	1,565,000

CALIFORNIA OIL RECEIPTS AT ATLANTIC AND GULF COAST PORTS

(Barrels of 42 gallons)

	Week Ended Aug. 16	Week Ended Aug. 9
Baltimore	.....	.....
Boston	.....	81,000
New York	211,000	483,000
Philadelphia	188,000	163,000
Others	.....	*124,000
Total	399,000	851,000
Daily Average	57,000	121,571
AT GULF COAST PORTS—		
Total	.....	.....
Daily Average	.....	.....
AT ATLANTIC & GULF COAST PORTS—		
Total	399,999	851,000
Daily Average	57,000	121,571
Daily Average Four Weeks Ended	88,536	113,179
Distribution of Total California Receipts is as Follows:		
Gasoline	399,000	*506,000
Gas Oil	.....	265,000
Fuel Oil	.....	80,000
Total	399,000	851,000

*Revised.

Weekly Comparison of Permits Granted for New Wells

State—	Week Ending Aug.23	Previous week	This week 1929	Total this month	This month 1929	Total this year	Total this date last year	1929 year total
Arkansas	..	1	4	4	16	64	102	159
California	28	22	33	85	95	556	876	1,231
Louisiana	20	10	16	71	67	699	557	903
Kansas	19	33	25	82	111	709	733	1,079
Oklahoma	38	53	89	172	343	2,152	2,277	3,578
Texas	115	122	184	429	773	5,248	5,745	8,697
Total	220	241	351	843	1,405	9,428	10,290	15,647

unit costs of refining caused thereby will be more than offset by subsequent improvement in the gasoline market.

Trading in the crude market has lately reached the dullest period experienced in years, and the general policy of quantity buyers of this commodity, such as large refining concerns on the Atlantic seaboard, is to make only spot purchases. Coastal and interior fields of Texas are drawn upon indirectly to supply a portion of this refinery demand, as the crude is bought usually in tanker lots from major pipe line companies having deep water terminals on the Gulf Coast.

These major companies, with one exception, are giving their support to the Texas statewide proration plan in order to get relief from excess crude takings by reason of their resale market having dwindled. Such companies as Humble Oil & Refining Company, Magnolia Petroleum Company, The Texas Company and Atlantic Pipe Line Company usually enjoy a heavy volume of crude brokerage business, and for that reason handle more crude than their refineries require. These companies have had to curb their crude movements to the Gulf Coast, in line with the decreased buying by Atlantic Coast plants.

Pure Oil Company has lately become a big factor in the Gulf Coast crude marketing circles by reason of having contracted to take 25,000 barrels oil daily from wells in the Van field unit; and this oil is difficult to move with so much cheaper priced crude from Southwest and West Texas and New Mexico fields being offered to prospective buyers. Pure Oil Company has not expanded its refining facilities in proportion to the boost in crude takings from Van, and lately has been actively seeking buyers for this crude in tanker lots.

Following are the more important production changes shown by the figures obtained from the American Petroleum Institute for the week ending August 23:

		Barrels
Archer County	Decrease	1,400
Ector County	Decrease	2,650
Winkler County	Decrease	4,800
Darst Creek	Decrease	2,200
Pierce Junction	Decrease	1,050
Refugio	Decrease	2,350
Carr City	Decrease	1,300
East Earlsboro	Increase	1,850
East Little River	Increase	2,350
Little River	Decrease	4,950
Mission	Decrease	1,000
Oklahoma City	Increase	37,500
Elwood	Decrease	10,000
Huntington Beach	Increase	1,200
Playa del Rey	(New)	12,000

Summarized Review of Field Results

State—	Completions This week	Completions Last week	Oil Wells This week	Oil Wells Last week	Gas Wells This week	Gas Wells Last week	Failures This week	Failures Last week	Initial Prod. This week	Initial Prod. Last week
New York	6	..	6	..	..	..	..	..	16	..
Arkansas	2	9	..	5	..	2	2	2	..	675
California	11	31	10	27	..	..	1	4	3,750	22,290
Illinois	3	3	1	2	..	..	2	1	5	8
Indiana	8	3	1	..	3	1	4	2	2	..
Kansas	24	17	7	8	8	3	9	6	1,611	5,170
Kentucky	32	31	20	16	6	7	6	8	415	1,280
Louisiana	26	33	7	7	4	8	15	18	2,260	2,390
Michigan	4	4	2	..	2	..	..	4	90	..
Mississippi	4	1	..	..	1	..	3	1	..	..
Missouri	2	..	..	..	..	..	2	..	..	..
New Mexico	9	11	9	10	..	..	..	1	102,505	103,645
Ohio	43	34	18	13	12	13	13	8	515	258
Oklahoma	76	71	46	48	10	5	20	18	67,633	202,413
Pennsylvania	43	9	32	3	5	5	6	1	182	29
Texas	88	102	52	48	6	13	30	41	40,226	44,217
West Virginia	13	12	3	1	9	8	1	3	19	4
Total	394	371	214	188	66	65	114	118	219,229	382,379
Increase this week	23	..	26	..	1	..	..	..	..	..
Decrease this week	..	..	..	..	..	..	4	..	163,150	..

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The engine is enclosed and working parts run in a bath of oil, assuring constant lubrication and keeping out grit and dirt. The constant lubrication permits a closer adjustment of the brasses and other bearings without danger of their heating.

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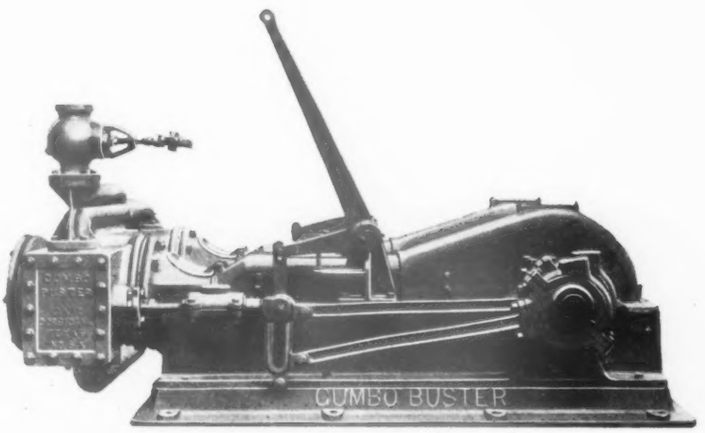

Drilling costs are greatly lowered through the use of the economically operated "Gumbo Buster" engine illustrated above. This sturdy engine is light in weight yet compact and is built to withstand the severest drilling conditions.

By attaching regular flywheel engine can operate in emergency on one cylinder. This feature may prevent loss of a well should one cylinder break down while the drill pipe is in the hole.

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PERSONAL MENTION-MEN YOU KNOW

C. W. Hanley, zone agent for Gulf Production Company in North and Central West Texas, has been transferred from Wichita Falls to Fort Worth as result of the company having discontinued its production office at Wichita Falls. Hanley will continue in the same capacity while located at the company's district offices at Fort Worth.

A. E. Anderson, president, Standard Day-A-Nite Company, 1212 Nance Street, Houston, has recently returned from a business trip of ten days in Oklahoma City, Tulsa and Fort Worth, where he made a study of conditions. J. C. Bradshaw, vice president of the company, spent a week late in August in San Antonio and Southwest Texas on business.

Norman V. Kinsey, agent in charge of the Zwolle, Louisiana, oil field for the minerals division of the Louisiana Conservation Commission, recently underwent a minor operation at a Shreveport sanitarium. He is now convalescing.

W. W. Keeler, chief geologist for Minnehoma Oil & Gas Company, Tulsa, has been transferred to Fort Worth to fill the same position with the Geo. F. Getty Oil Company and Geo. F. Getty Petroleum Corporation. All three concerns are subsidiaries of Geo. F. Getty, Inc., of Los Angeles.

William Ivey, official of Kern River Oil Fields, Ltd., is returning to the home office of the company in London, England, following an extended tour of the company's holdings in California.

P. C. Murphy

P. C. Murphy, Houston, general chairman of Texas Gulf Coast operators in move to bring about state-wide production curtailment. He is assistant to the president of Humphreys Corporation.

R. S. Sterling, head of Humble Oil & Refining Company from its beginning until after the control was sold to Standard Oil Company of New Jersey and for a period chairman of the board under that control, is the democratic nominee for governor of Texas, equivalent to election. Accused by opponent politicians of representing "Standard Oil" in his ambition to be

R. S. Sterling
To Be Texas' Governor

governor, Candidate Sterling announced that he had disposed of all his holdings in that connection. Since retiring as Humble chairman, he has given his attention to publishing, barking, real estate and the public service. Long chairman of the Houston Port Commission which directs development of the Houston Ship Channel, during the last three years he has served Texas as chairman of the highway commission, making a record which escaped criticism in a bitter political campaign.

Pat M. Neff retains his position as chairman of the Texas Railroad Commission (ex-officio conservation commission in Texas). He was nominated in the state democratic primary over W. Gregory Hatcher, state treasurer. A former governor of Texas, Neff was appointed a member of the commission by Governor Dan Moody to fill out the term of Clarence E. Gilmore who died several months ago.

L. F. Adamiak, petroleum engineer for the Polish Bureau of Mines, has been invited to read a paper on "Investigation of Petroleum Industry Accidents by the Polish Bureau of Mines" before the Nineteenth Annual Safety Congress, to be held in Pittsburgh from September 29 to October 3. Adamiak has been in Los Angeles for several months while on an extended leave of absence to study American field practices.

A resolution of sympathy was passed by Mid-Continent Oil & Gas Association following the death of T. B. Slick in Baltimore last week. The vote was taken August 22, when oil producers were in session to consider the proration schedule for September.

The resolution follows:

"Resolved: That in the death of Thomas B. Slick the oil fraternity and the people of the State of Oklahoma have suffered a severe loss. His dauntless courage as a developer of Oklahoma's natural resources coupled with his untiring energy, and a sense of fairness and liberality toward all with whom he came in contact made his life invaluable to the community and to the oil industry.

"We extend to his widow and members of the family our sincere sympathy and direct the secretary of the Mid-Continent Oil & Gas Association to spread this resolution upon the records of that organization, of which Mr. Slick was a consistent and liberal supporter."

Dave M. Wallace, who has had charge of Texas operations of Geo. F. Getty Petroleum Corporation and New Mexico activities of the Geo. F. Getty Oil Company, with headquarters at Fort Worth, has resigned to engage in general consulting work. Wallace is a member of the American Association of Petroleum Geologists, and has been with the Getty interests about three years.

F. C. Sealey

General chairman for Southwest Texas producers, as well as field chairman for several Gulf Coast fields, in state conservation program. He has been active in proration and conservation work since last year, when he became head of Darst Creek operators in their regulation of that field, Guadalupe County. He is assistant to the manager of the South Texas division of The Texas Company.

Oklahoma--Kansas Field Notes

FLOYD L. SWINDELL, *Staff Representative, Tulsa, Oklahoma*

Drilling Campaign in Oklahoma City Field Nearing Climax

OKLAHOMA CITY.—The fiscal week ending Monday morning August 25 is probably representative of what may be expected from the Oklahoma City pool for the next few weeks. Twenty-nine wells were completed for a total actual initial gauge in excess of 100,000 barrels. On that date about 35 wells were waiting on cement to set on oil strings, drilling plugs, laying down drill pipe, or bailing, which indicates that a large number of completions can be expected during the next week. Few new locations are being announced and the rapidity with which wells are being completed would seem to show that the sensational drilling campaign has reached its climax.

Production was extended one location over a quarter mile to the west with the completion of T. B. Slick's Campbell 1, NE SE NE Section 3-11n-3w, the first well to be completed in Section 3. The well flowed 13,876 barrels in eight hours 20 minutes from broken sand at 6261 to 6570 feet. This would make it good for approximately 40,000 barrels if figured on a 24-hour gauge at the rate of flow during its first 8 1/3 hours. Slick and Atkinson's Trumbley 1, NW NE SW Section 2-11n-3w, was completed at a total depth of 6565 feet for a gauge of 202,000,000 gas, showing gasoline. The first big gasoline well for this sector was completed by T. B. Slick on the Dougherty 1, SE SW NW Section 2-11n-3w, approximately one-quarter mile southeast of the Campbell 1 in Section 3. It flowed 2611 barrels of gasoline in 18 hours 50 minutes from a total depth of 6575 feet.

In the southern part of the pool, Sinclair Oil & Gas Company's School Land 67, well No. 5, NW NW SE Section 36-11n-3w, flowed 8808 barrels in six hours and is one of the largest wells completed in the field. This well has a bit of historical interest since it was drilled but 100 feet west of a location which condemned the property in 1921-1922. The original well was drilled by L. E. Trout and associates on the basis of geology worked by Trout. A deal was made with Firestone Oil Company of Newton, Kansas, to drill the well to 3500 feet. The Firestone Company gave up the location at 3507 feet and Trout and his associates were able to make a further deal with Bill Creekmore and W. B. Green to drill to 4000 feet. At this depth W. R. Ramsey was prevailed upon to drill an additional 500 feet. However, at 4479 feet the test was abandoned after having had several small shows of gas. The hole was drilled with cable tools and was underreamed from 480 feet to the bottom. It is interesting to contemplate the difference that might have existed in the development of the Oklahoma City structure had these pioneers been able to drill an additional 2100 or 2200 feet to the top of the now productive Wilcox sand.

Practically all enthusiasm over wildcat possibilities in Oklahoma County has died since three of the principal tests have failed to find commercial production after having drilled into the Simpson formation. Mid-Kansas' Messer 1, SW SW SW Section 32-14n-3w, had the top of the Sylvan at 6430 feet, Viola at 6450 feet, and the Simpson at 6495 feet. Several small shows have been cored in the Simpson. It is now coring below 6675 feet after recovering nine feet of green shale and sandy dolomite at 6659 to 6668 feet. In the next township south, Magnolia-Ramsey's Johnson 1, NE NE SW Section 35, is plugging back and bailing after having been drilled to a total depth of 7212 feet. It will be shot at 6280 feet. Mid-Kansas, Cromwell 1, SE SE SW Section 18-12n-1w, after plugging back from 6481 to 6200 feet, was shot at 6130 to 6190 feet, where it is bailing and showing salt water. It will probably be abandoned at this depth. Prairie Oil & Gas Company-Slick's Dills 1, CSE NW Section 17-13n-3w, has been plugged back to 6600 feet where it is bailing salt water. Prior to plugging back it was bottomed at 6821 feet where it was flowing about 100 barrels of water daily. Ryan Consolidated's Lawton 1, NE NE NW Section 3-11n-2w, approximately four miles northeast of the Oklahoma City pool, is waiting on cement to set at 6903 feet. At about the same distance on the opposite side of the pool, Geo. D. Warr et al's Castle 1, SW SW NW Section 20-11n-3w, is waiting on cement at 6422 feet.

Tatums Pool Most Active Area in Southern Oklahoma

Tulsa.—The Tatums pool, 1s-3w Carter County, continued to be Southern Oklahoma's most active area with six new producers and the announcement of four new locations during the week. F. W. Merrick Incorporated, Mitchell 1, SE NW SE Section 24-1s-3w flowed 800 barrels during its initial 24-hour gauge from a series of sands between 2284 and 2460 feet. It is an east offset to Trevelyn Oil Company's Mitchell 1, which extended production to the southeast when completed several weeks ago. The Texas Company's S. A. Eaves 3, NE SE SW Section 24-1s-3w, southwest diagonal offset to the extension well, swabbed 450 barrels during the first 24 hours. The largest completion was C. L. Anderson, Eaves 3, SE NE SW Section 24-1s-3w, which started flowing Thursday night, August 21, and Friday morning was rated at 65 barrels hourly with indications that production would increase to 100 barrels hourly before the well is finally completed. Present indications are that 50 or 60 additional wells will be drilled in the area.

In the Cement district Noble and Olsen completed their Rowe 4, SW SE NE Section 36-6n-10w, flowing and swabbing 570 barrels initially. At the end of the week it had increased to 965 barrels in 24 hours. Magnolia Petroleum Company's Lindsey 9, NW NW SE Section 36-6n-10w is rigging up cable tool to drill deeper. The well is now

producing about 200 barrels from a series of sands between 3141 and 3341 feet. Mid-Kansas and Ramsey, Mildred Surbeck 1, SE SW SW Section 11-5n-9w, deepest test in the area, is drilling below 4000 feet.

Three miles southeast of the Tatums pool, Magnolia Petroleum Company is cementing off a cave in its I. E. Harmon 1, NW NW SW Section 28-1s-2w, Carter County. Total depth is 1005 feet.

J. H. Hudson et al's Fulton 1, NW SE SW Section 28-4s-2w, three-quarters of a mile southwest of production in the old Hewitt field, is drilling below 5350 feet. This is one of the deepest tests ever to be drilled in the area and should reveal some interesting geological data even though unsuccessful in locating commercial production.

Active Kansas Drilling Campaign Nearing Close

Tulsa.—New work in Kansas is slowing down after a season of the most active development that the state has known in several years. During the past week only 15 locations were reported from nine counties, Sedgwick County leading with four. These were in the new Eastborough pool, 27s-2e.

Argus Gas Company completed three wells in Morton County in what is known as the Hugoton gas area. Button 1, CSE Section 11-33-39w, was completed as an 8,000,000 gasser from a series of sands between 2546 and 2700 feet. Approximately four miles to the southwest Mangle 1 CNE Section 20-33-39w, was good for 8,000,000 gas and the Morgan 1 CSE Section 6-33-39w, gauged about 2,000,000 gas. Gas production has now been practically proven over an area extending from the south Grant County line southwestward to within about eight miles of the southwest corner of the state.

Although overshadowed by the development of southwestern Kansas and wildcat development over the western half of the state, the older areas have come in for several interesting tests. T. K. Simmons et al 3, NE SE SW Section 19-22-11e, west of Madison in Greenwood County, had a sand from 2053 to 2102 feet where it filled up 900 feet with oil. After shooting it gauged 780 barrels in 22 hours.

New Seminole Area Pool

Tulsa.—Amarada Petroleum Corporation-Dixie Oil Company's Chase 1, NW NE SW Section 29-9n-6e, has all of the earmarks of being the discovery well in a new pool for the Seminole district. This test has been running consistently high as compared with East Earlsboro, having had the top of the Mayes at 3695 feet, top of Woodford at 3790 feet, the Sylvan at 3930 feet, Viloa at 3995 feet, and top of the Simpson dense at 4034 feet. The Wilcox sand was topped at 4087 feet and drilled to 4116 feet. During the first 33 hours the well swabbed 1995 barrels. The sand is very hard and will be shot. The well is located about two miles west of Seminole City and almost in the center of a circle of dry holes all of which have been drilled deeper than the new well.

Prairie Oil & Gas Company has had a real engineering problem on its Tomlin 3, SE NW NW Section 23-6n-3e, Wanette pool, where 8¼-inch casing was set in shale at 3445 feet, approximately 20 feet above the top of the sand. Upon penetration of the producing horizon, gas broke out behind the 8¼-inch and created 50 to 100 yards from the derrick floor in six or eight places. Gas flow was estimated at 50,000,000 cubic feet and the well was making about 20,000 barrels of water. Operators set 773 feet of 10-inch casing over the 8¼-inch. The inner string was then ripped from 2200 feet to 2208 feet. In this manner the annular space between the outside of the 8¼-inch and the wells of the hole was plugged and gas shut off from entering the surface formations from the point of the 10-inch casing seat to the surface. Upon ripping the 8¼-inch, cratering was stopped and the flow of gas directed through the 8¼-inch.

First Oklahoma City Tank Farm

Tulsa.—Sinclair Oil & Gas Company is building the first substantial tank farm in the Oklahoma City field. Chicago Bridge & Iron Company has the contract for erecting 27 tanks, each of 80,000 barrels capacity. These tanks will be equipped with Wiggins Floating roofs.

Oklahoma Production Set at 550,000 Barrels Daily

(Continued from page 37)

That a county attorney may prosecute an offender under a criminal provision, the offense being a misdemeanor, punishable by fine, jail sentence, or both;

The corporation commission may take action itself by citing an offending company for contempt for an existing order. The statute provides a maximum fine of $500 for each day of the violation.

Through the attorney general, the state may ask for a receiver for the offending company.

Through the attorney general, the state may seek an injunction to restrain any oil producer from producing oil in violation of an existing order.

A fifth possible approach is the provision by which one oil producer may take action against another, when provisions of a corporation commission order are being violated.

Harry H. Smith, secretary, Mid-Continent Oil & Gas Association, reported at the meeting to the effect that members of the legal division of the proration committee had no doubt of the authority which supports the statutes under which proration orders are written.

The question of violations of proration orders had considerable airing at the meeting. Several instances of violation were discussed. A vote showed it to be the sense of the meeting that action be taken to compel all oil producers to comply with proration orders of the commission.

Make 61 Citations

The first official move to enforce proration more vigorously came this week, when citations were issued for 61 oil concerns and individuals. These are cited to appear before the corporation commission September 8 to answer charges of producing oil in violation of the orders of the body. Many violations are known to be the result of inability to keep within limits due to conditions peculiar to leases or fields.

Some, however, are considered wilful violations of the order of the corporation commission.

In the schedule prepared for September, most of the pools of the Greater Seminole area have been placd in the classification which will allow production of one-half of potential output. East Earlsboro and South Earlsboro, parts of Greater Seminole, have been given allowable production of 25 per cent of potential, with 15,000 barrels daily the minimum for East Earlsboro. Wanette and Konawa will be allowed to produce 18¾ per cent of potential.

Oklahoma City, with potential of 700,000 barrels daily has been given allowable output of 88,903 barrels but it is understood that the output there will be controlled by the requirements of pipe line purchasers.

North and West Texas Field Notes

H. H. KING, *Staff Representative, Fort Worth, Texas*

Leck-Daugherty Pool Extension Will Revive Drilling Activity

SAN ANGELO, Texas.—Extension of the Leck-Daugherty pool, Winkler County, more than a half mile to the southeast with a 1500-barrel flowing well promises to revive development work, and possibly lead to considerable more producing area being added. Atlantic Oil Producing Company and Joe C. Maxwell's Lum Daugherty 1 provided the extension early this week after drilling saturated lime formation at 3027-45 feet. A string of tapered tubing was installed before the well was given a production test. The volume of gas accompanying the oil flow is estimated at 4,000,000 cubic feet daily. This well is located 2310 feet from the east and 1650 feet from the south lines of Section 10, Block 74, P.S.L. Survey, being on a 60-acre lease. L. C. Turman et al have lease on the 60-acre tract adjoining on the north, while Empire Gas & Fuel Company has the south 120-acre lease. The latter two will drill offsets.

Development of the Leck-Daugherty pool in 1928 and early 1929 defined the oil area in all directions except to the south, and the latter trend was not explored because Prairie Oil & Gas Company had a 320-acre lease in this direction. The latter company quit drilling after scoring three small wells on the north end of the tract. The new strike makes the south end of the above half section appear more favorable for production than the north end, as the oil horizon in Daugherty 1 is about 100 feet higher on structure. Daugherty 1 logged top of the brown lime at 2631 feet, with a surface elevation of 2891 feet. No dry holes have been drilled in this south trend of production. Tidal Oil Company and Humble Oil & Refining Company are joint owners of three solid sections lying immediately south of the section bearing the extension well.

Deep production in the Big Lake field continues to climb to new peak levels each week, and the five completed wells and two that are in process of completion produced 10,171 barrels of high gravity oil during 24-hour period ending 7 a. m. August 25. These wells are also making 121,500,000 cubic feet of gas daily with the oil, even though back pressures, varying from 100 to 550 pounds is applied to each producer. Big Lake Oil Company's University 3-C, which holds the distinction of being the deepest oil and gas producer known and also the deepest drilled hole in the world outside California, contributed 150 barrels oil and 2,978,000 cubic feet of gas to the above production figures, with 100 pounds of back pressure. This well has a total depth of 8923 feet, having open hole below the 7806-foot level, where a string of 5 3/16-inch casing was cemented with 125 sacks. It was drilled to the so-called deep oil horizon with cable tools, then rotary was installed.

Upton County added two new wildcat locations within the past week in the eastern part of the county, Penn Oil Company and Shell Petroleum Corporation will drill a deep test on the T. M. Anderson land, having made location at center of SE Section 37, Block "Y," C.C.S.D.R.G.N.G. Ry. Survey. Gulf Production Company is moving in materials to drill north of the McCamey field to test out a short time lease on the King et al land. The latter location is 330 feet north and 990 feet east of the southwest corner Section 28, Block 2, M.K. &T. Ry. Survey. Gulf Production Company's J. H. Shirk 1-B, located a short distance to the southeast, pumped 210 barrels 29.3 gravity oil in initial gauge at 2685 feet. Top of brown lime was logged at 2460 feet, with a surface elevation of 3096 feet.

Fuhrman Petroleum Corporation's wildcat gasser on the Ford ranch in southern Andrews County remained shut in during the past week as result of negotiations still pending for the sale of a one-half interest in the well and acreage to Ed A. Landreth of Fort Worth and associates for a reported consideration of $500,000 cash and a similar amount payable from oil if produced. This gasser is believed to be the forerunner of a new field for West Texas. It gauged 26,000,000 cubic feet of dry gas from lime formation at 4062 to 4068 feet on August 9, after blowing in five days previous.

Third Producer Outside Van's Unitized Area Completed

CORSICANA, Texas.—Completion of the third oil producer outside the Van field's unitized area was made August 25 when Humble Oil & Refining Company's R. S. Blake 1 gauged 60 barrels clean oil per hour through 34/64-inch choke from Woodbine sand formation at a total depth of 2947 feet. This well has a rated potential of more than 5000 barrels daily. It is located midway between the first two successful completions outside the unit zone and the main field, or about 3500 feet from the nearest production. The Blake lease consists of 201.4 acres, and is virtually proven for oil production. The new producer is to be given a connection by Pure-Van Pipe Line Company, which is running about 100 barrels daily from the other two producers located outside the pooled acreage and 25,000 barrels daily from the 98 completions within the 5800-acre Van unit.

Blake 1 encountered first oil saturated sand and cemented seven-inch pipe at 2371 feet after having logged Austin chalk at 2264-2327 feet, with a surface elevation of 497 feet. The hole was carried to exactly 2450 feet below sea level before testing for completion, as this is the maximum depth that Pure Oil Company carries tests drilled within the unitized area. Liner was set on bottom, using 500 feet of 40 mesh screen and 67 feet of blank. A string of 2½-inch tubing was installed at 2920 feet. The well cleaned itself within five minutes, and then was throttled for the potential gauge. After this gauge was taken the flow was then reduced to five barrels oil per hour. The last 62 feet of formation drilled proved to be the best oil sand.

Pure Oil Company's Ella York 1, an east offset to the Blake producer, cemented seven-inch casing at 2471 feet, and was coring sand at 2535 feet August 25. York 1 logged Pecan chalk at 1520-1580 feet, and Austin chalk at 2264-2389 feet, with a surface elevation of 487 feet. Local faulting of a minor nature accounts for the York 1 being lower on structure. Pure Oil Company's M. L. McMahon 1, located southeast of the other two producers on non-unitized acreage, has cemented casing at 2842 feet after coring sand to 2852 feet. Humble Oil & Refining Company's Blake 2, a south offset to the same company's Cor-

rell 1, which opened up the northeast extension, encountered oil sand at 2745 feet, and has shutdown to cement pipe, while Blake 3 is rigging up rotary. The Texas Company is rigging up rotary to drill Carter 2, which is an east offset to the same company's producer.

Geo. S. Anderson, Fort Worth operator, and associates are in line to be the first non-unit members to score production on the Van dome, as their Sanger eight-acre strip test has logged the upper key formations favorable for a high well. First Pecan chalk was encountered at 1565 feet, and the top of the Austin chalk is reported to have been found at 2471 feet, with a surface elevation of 550 feet. This test was drilling below 2575 feet August 25. No arrangements have been made to market oil production, but this well will be served on a restricted production basis by Pure-Van Pipe Line Company along with all other completions under the terms of the proration plan that is to be applied and enforced throughout the field by the Texas Railroad Commission. Details of this proposed proration plan were published last week.

Pure Oil Company's W. F. Swain 1, located in the northwest corner of 48-acre lease and within the Van unit, has been officially completed flowing 18 barrels oil and 2,000,000 cubic feet of gas on open flow at 2930 feet. This small producer is a south offset to the same company's Brawner 1, which was completed July 10 at 2924 feet making 35 barrels oil per hour. Brawner 1 is making a different grade and color of oil than usually found in the field. Pure Oil Company's J. F. Crim 1, a southwest offset to the Brawner, had reached a depth of 2946 feet without showing the usual oil sand saturation on August 25.

Included in the four new completions on the Van unit within the past week was the highest well on structure in the field. This honor was gained by Pure Oil Company's J. R. Shivers 1, located in northeast corner of 46-acre lease, and casing as cemented on top of first oil saturated sand at 2222 feet. The hole was deepened to 2870 feet after landing pipe, resulting in a flow of 112 barrels per hour via 11/16-inch choke.

Southeastern Van Zandt County is to be given a Woodbine sand test by D. Harold Byrd, Dallas operator, and associates, who have assembled a wildcat drilling block centering on the J. Piles survey, about two and one-half miles northeast of Edom. Location has been made 150 feet out of the southwest corner of the C. H. Morris 197.1-acre farm, J. Piles survey. Favorable geological data has been developed in this area through extensive geophysical work. Gulf Production Company is reported to have donated dry hole money and a few leases from its so-called Chandler block, which adjoins the above drilling block, to Byrd and associates in order to get a test drilled.

H. J. Cox, Fort Worth operator, and associates, are moving in materials to drill a 450-foot test in Southern Cherokee County about five miles southwest of Alto. These operators have assembled a block of about 5000 acres, and will drill on the Farris(Geo. Davis) farm, P. Bean survey. A portion of the original block has been sold to Cranfill & Germany, Inc., and D. Harold Byrd. R. H. Dearing & Sons, Dallas, have contracted to drill the test, and are now moving in rotary equipment from test recently completed in southwestern Rains County.

Sun Oil Company has decided to make use of its own rotary in drilling its Noonday wildcat block, Smith County, and is shipping in materials from Richland and Lockhart fields. This location was announced last week as having been made on the Oscar McGehee 99.37-acre farm, Thomas Quevedo survey. R. L. Marston, who was formerly in charge of Venezuelan operations of the company, has been placed in charge of this wildcat test, with temporary headquarters at Tyler, Texas.

Gray County Operators Build Up Potentials for Proration

Amarillo, Texas.—Building up of potential production of wells in Gray County is being attempted by a number of operators and companies in preparation for the introduction of a proration plan for the entire Texas Panhandle. This stimulation of production, and a normal quota of completions in Gray County has held the crude output of the district near the 100,000-barrel level for the past two weeks, or approximately 20,000 barrels in excess of the maximum production allocated by the Texas Railroad Commission's proration plan.

Deeper drilling conducted by Phillips Petroleum Company in the Bowers-Jackson field, Gray County, on its Wm. Jackson-Joe Dan 2-A transformed this old well from a small pumper to a daily flow of 3600 barrels. This well was completed in September, 1929, swabbing 350 barrels initial at 2910-55 feet with a total depth of 2970 feet, but production soon dropped to 50 barrels daily. The hole was deepened to a lower horizon at 3020 feet, and responded with the big flow upon the introduction of the gas lift. The Texas Company's J. B. Bowers 5, located on an adjoining lease, made 900 barrels daily when deepened from 2902 to a second horizon at 2950-75 feet, while Bowers 1 is also seeking this lower oil supply below 2950 feet. The latter was originally completed in January, 1928, as a 1500-barrel well at 2861 feet, but increased to 200 barrels per hour when carried to 2895 feet one year later, and has yielded approximately 2,000,000 barrels of oil since completion. Gulf Production Company has been drawn into this deepening program, and is drilling below 3077 feet on Bowers 3-A which has produced more than 1,000,000 barrels of oil 2900-41 feet.

Outpost tests in the Finley-Brown field, Gray County, indicate a partial defining of the oil area to the east and northwest. Magnolia Petroleum Company's Wright-East 1 made only 120 barrels daily on gas lift at 2925 feet after drilling through two oil horizons. This small well is east of the center of the field. Continental Oil Company's Combs-Worley 1, located in SEc NE¼ Section 38, developed only 200 feet oil in hole from pay at 2885-95 feet, with a total depth of 2905 feet, but will drill deeper.

Two Oil Wells Completed at Humble

Houston.—Two oil wells were completed the past week in the Humble field, Harris County. Rio Bravo Oil Company's H. E. & W. T. 1 came in flowing 1200 barrels daily on a three-eighths-inch choke, showing 900 pounds pressure, from total depth of 4306 feet. Cullen & West's Burt 2 came in for initial production of 500 barrels daily at 4855 feet.

Plan Gas Line for Victoria County

Houston.—United Gas Company is building a gas line to Lion Oil Refining Company's gas well, McFadden 1, in the Bloomington field, southern Victoria County. That well was completed last June as a 35,000,000-cubic foot gas well at 3743-49 feet.

Three other tests are now in progress in the area. Lion Oil Refining Company's McFadden 2, which is 660 feet due east of No. 1, is drilling shale at 4100 feet. The Texas Company's McFadden 1, Hannibal Bonney Survey, is drilling shale and sand at 3505 feet. Houston Oil Company has set 12½-inch casing at 1160 feet in its McFadden 1.

Gulf Coast and South Texas Fields

JACK LOGAN, *Staff Representative, Houston, Texas*

Pettus Leads Gulf Coast Fields With Five Completions

HOUSTON.—The Pettus district, Bee and Goliad Counties, led all areas in South Texas and the Gulf Coast during the past week in number of completed wells, with five producers and three failures. In the meantime drilling had been progressing on numerous other tests, and approximately a dozen additional wells were near completion early this week.

Humble Oil & Refining Company last week met the reduced price of $1.15 per barrel announced for Pettus crude some time earlier by Houston Oil Company, Humble Oil & Refining Company's former posted price was $1.40 per barrel. The only other purchaser in the field is Gulf Coast Pipe Line Company (William F. Morgan interests), which has also met the reduced price. All crude is being moved out in tank cars, no pipe line outlet being available. Houston Oil Company is among the producers in the district, and only recently entered the field as a purchaser. To take care of its purchases in the field the company has completed construction of a 30-car loading rack at its Portis lease just south of Pettus. In addition to its own production it is buying considerable oil on the Pettus townsite and from adjacent leases. This crude is being shipped principally to the company's Camden, Arkansas, refinery, but some is going to the Corpus Christi shipping and refining district. Houston Oil Company recently began operation of a small refining still at Violet, several miles west of Corpus Christi, through which about 200 barrels of crude are run daily. The company has two 55,000-barrel tanks in service at the refinery site.

Four of the five new producing wells at Pettus are in the townsite. Houston Oil Company's Townsite 1, Block 33, came in flowing 425 barrels of oil daily through a three-eighths-inch choke, and showing 1000 pounds pressure, the total depth of the well being 3943 feet, with 6-5/8-inch casing cemented at 3899 feet. S. R. C. Corporation's Townsite 1, Block 31, came in with estimated flow of 30,000,000 cubic feet of gas daily, accompanied by a spray of gasoline, the pressure on tubing and casing being 1100 pounds. Getty Oil Company's Townsite 1, Block 40, completed at 3849-3873 feet, came in flowing estimated 25,000,000 feet of gas daily, together with a spray of gasoline, operating through one-half-inch choke and registering pressure of 1200 pounds. Glasscock Brothers' Townsite 1, Block 24, was completed at 3865-79 feet. It also is a gasoline producer, with estimated yield of 20,000,000 cubic feet of gas daily, together with approximately 100 barrels of gasoline, flowing through a five-eighths-inch choke and showing pressure of 1250 pounds.

Cosden Oil Company has completed McKinney 3 in the Cosden pool west of Pettus townsite at 3651-55 feet. The well is 500 feet west of No. 1, discovery well of the Cosden pool. No. 3 came in originally flowing 240 barrels daily, but later had to be cleaned out, following which it was brought back for daily yield of approximately 40 barrels daily.

Union Producing Company's Ray 12, a wildcat in the W. D. Sutherland Survey, Goliad County, in Block 17, Subdivision C, Ray Ranch, has been abandoned at 5514 feet. That test was approximately six miles northeast of the Pettus oil pool discovery well, and two miles southwest of Zoch et al's Goliad County wildcat gas producer, Kaufman 1.

Union Producing Company has also abandoned its wildcat, Ray 10, in the George Neal Survey, Bee County, following an unsuccessful test of an oil showing sand at 4032-40 feet. This well was located approximately 3000 feet northwest of the same company's Ray 3, oil and gas producer, although not in commercial quantities, being in Block 6, Subdivision B, Ray Ranch, Bee County.

Another test in the Pettus district abandoned recently was Grayburg Oil Company's Copeland 1 in the Grayburg pool, eight miles west of the Pettus discovery well. It was abandoned in shale at 3834 feet.

West Flank at Barbers Hill Proved for Oil Production

HOUSTON.—The west flank of Barbers Hill dome, Chambers County, has been further proved for production through completion of a semi-wildcat as a flowing oil well. It is Sun Oil Company's O. K. Winfree 1, on the central part of the west side of the dome, 2500 feet south of Humphreys Corporation's Kirby A-8, northwest flank deep sand discovery well, and 4000 feet north and a little west of Yount-Lee Oil Company's Zadie Fisher 1, which opened deep production on the southwest flank of the field several months ago. The new Sun Oil Company well came in late last week flowing at the rate of 1080 barrels daily on a 10-hour gauge, following setting of five joints of screen at 5328 feet. The well registered pressure of 265 pounds, and the crude tested 31 corrected gravity.

Before reaching the oil sand it was necessary for Sun Oil Company to drill through about 900 feet of cap rock, going back into sand and shale around 4850 feet. The cap rock thus forms a ledge extending out from the main dome mass. A similar condition exists on the east flank of the dome, but there the ledge is apparently not as thick, only several hundred feet having been drilled through ordinarily in the past. Ledges or overhangs of this kind have been found on other Gulf Coast salt domes, but they have been rather rare, while at Barbers Hill they are regularly expected. There are even instances at Barbers Hill where the drill has passed through cap rock into salt and then back again into the regular sand and shale formations. This overhanging ledge of hard formations necessitates extreme care in drilling, with surveys commonly made in order to keep the wells vertical.

Barbers Hill is one of only a few of the Gulf Coast salt dome fields with production established already on all sides of the dome, although it is generally believed that most of the domes will ultimately produce from all sides.

Furthermore, even without considering the shallow sands, which are productive on several sides of the field, the proven area extends completely around the dome, with wells 5000 feet deep or deeper encircling the dome with but few, and relatively short breaks. The 4000-foot break between

the new Sun Oil Company well and Yount-Lee Oil Company's Fisher 1 is the largest on the west side of the field, while the south and east flanks are closely dotted with producing deep wells. The western half of the north flank comprising a distance of about 6000 feet constitutes the most important unproved sector of the dome, and the fact that it has not been proved up yet is accounted for probably by the absence of any deep drilling. At any rate, a recent deep test near the center of the north flank, Humphreys Corporation's Morgan 1, was completed as an oil well, and it is still producing. It is about 6000 feet from Humphreys Corporation's Kirby A-8, the deep sand discovery well of the northwest flank.

Humphreys Corporation controls all the acreage along the 2500-foot sector between the new producer of Sun Oil Company on the Winfree land and the northwest flank discovery deep well, Kirby A-8, that intervening land being on the O. K. Winfree and the A. E. Barber land, principally. To the south of the new Sun Oil Company producer the 4000-foot sector extending down to Yount-Lee Oil Company's Zadie Fisher 1, producer, is divided among several operators, including Sun Oil Company, Sinclair Oil & Gas Company, Humphreys Corporation, Rio Bravo Oil Company and Yount-Lee Oil Company. The completion of Sun Oil Company's producer will necessitate the immediate drilling of three wells, a west offset by Sinclair Oil & Gas Company, a north offset by Humphreys Corporation, and a west offset in turn to the latter by Sinclair Oil & Gas Company.

Aside from the above semi-wildcat producer, there were three other completions at Barbers Hill the past week. Sun Oil Company's Chambers County Agricultural Association 6, south flank of the dome, came in flowing 1000 barrels of oil daily through one-half-inch choke, with 100 pounds pressure, from 4124 feet. The same company's Wilburn Fee 8 came in flowing 700 barrels of pipe line oil daily at 5270 feet. The other completion was Sinclair Oil & Gas Company's McKinney Fee 5, which came in flowing 250 barrels daily through a one-half-inch choke, total depth being 5244 feet.

Barbers Hill is the most active of the salt dome fields of the Texas-Louisiana Gulf Coast and ranks along with Pettus and Refugio as one of the most active areas in South Texas, with about 30 rigs running.

Three New Wells for Esperson Dome

Houston.—Cranfill-Reynolds Company, principal operator at Esperson field, Liberty County, has completed three oil wells there recently. Esperson 14 came in flowing 200 barrels 23 gravity pipe line oil daily following setting of 46 feet of screen at 3312 feet. Esperson 15, producing the same grade of oil from the same sand at total depth of 3298 feet, came in also as a 200-barrel well. Moores Bluff 3 was completed for 125 barrels daily production at 2336 feet.

The above company's Vajdak 1 on the east side of the field was recently reported still producing a small amount of oil and gas at 7386 feet. That is the deepest production ever developed along the Texas Gulf Coast, although two wells at Evangeline, Louisiana, have produced from slightly greater depths. Cranfill-Reynolds Company now has three drilling operations under way at Esperson, namely Esperson 16, Davis 5 and Moores Bluff 4, all of which are drilling below 500 feet. Yount-Lee Oil Company's Moores Bluff 3, on the east side of the field, slightly south of the above mentioned well, Vajdak 1, was drilling late last week at 7485 feet in hard shale.

Wild Gas Well in Jackson City Limits Kills Workman

JACKSON, Mississippi.—Mississippi's gas field located in Hinds and Rankin Counties in and around the Jackson city limits encountered its first wild gas well when Ohio Oil Company's Payne 1, SE NE Section 12-5-1e, Rankin County blew out Friday, August 22, at total depth of 2395 feet, killing one of the drilling crew. The well on Monday, August 25, had gained enough pressure to blow drill stem from the hole. The well had penetrated the chalk rock about three feet and black shale overlying the chalk had been encountered at 2303 feet. Elevation is 268.8 feet. The well was brought under control.

This test is the Jackson field's twelfth gasser. The eleventh was completed a few days before in Capital Oil & Gas Company's Brown 1, SW SE Section 28-6-1e, Hinds County, making an estimated gas yield of 15 million cubic feet from total depth of 2503 feet. Elevation is 302 feet. The same company's Clark 1, SW SE Section 10-5-1e, Hinds County, was abandoned as a salt water hole in chalk rock at total depth of 2628 feet, chalk having been topped at 2501 feet with elevation of 266.3 feet. Marine Oil & Gas Company's Country Club 1, Section 31-6-1e, Hinds County, was abandoned as a dry hole hole in igeneous wash at total depth of 3063 feet, this formation having been entered at 3042 feet. Elevation was 318.4 feet.

An outlet for the gas of the Jackson field is now a topic much discussed here. So far only 1,250,000 cubic feet daily of the more than 200,000,000 cubic feet open flow capacity is being sold commercially, all the other gas being pulled from the producing gas wells being used for fuel to drill other tests or being shut in. As Louisiana Gas & Fuel Company is owner of acreage here and one of the largest gas wells and is said to be related indirectly with Southern Natural Gas Company, whose Birmingham-Atlanta-Monroe, Louisiana, trunk line passes in this vicinity many expect this line to cut into the Jackson field for the gas output.

Southern Natural Gas Company which is reported negotiating for the purchase of the holdings of Amory Gas Company in Monroe County, Mississippi, has already arranged to take the surplus gas the latter company has from its two gas producers in the Amory field and has laid a four-inch line to Tupelo, Mississippi, to furnish gas to that town, and is also planning to pipe gas to Aberdeen and Okolona, two other northeast Mississippi towns.

This company's line from Yazoo City, Mississippi, to Mobile, Alabama, a branch of its Birmingham-Monroe line, will be ready for gas on or about September 1, it is announced.

The Mississippi Power & Light Company, holders of the artificial gas franchise in Jackson, has agreed to submission of natural gas rates as they prevail at Monroe, Louisiana, at a special election to be held in the near future. This rate is 30 cents per 1000 domestic rate with $1 minimum per month and an industrial rate of 10 cents per 1000 feet. A sliding scale is given for heating office buildings and a special rate of five cents net is quoted for municipal utilities.

The agreement stipulates "that Jackson natural gas be used but should the Jackson gas field become insufficient for the performance of that thereunder required of grantee it may thereafter and not before obtain natural gas from other fields, and rates therefor shall be fixed that are fair and reasonable."

Island Cities Gas Company, which has franchises for the towns of Crystal Springs, Hazelhurst, Brookhaven, McComb City, all south of here in Mississippi, and for five southeast Louisiana towns, as well as for several other south Mississippi towns, held a conference here several days ago. Quotations on a 10-inch line to serve these towns was recently asked of Continental Supply Company of St. Louis by Island Gas Company.

Texas Allowable Production Revised to 775,000 Barrels

(Continued from page 38)

under the commission's order. However, if runs exceed the above amounts, his company will ask the commission to allocate their necessary requirements to other districts or issue an order to reduce production to the amount nominated. It is apparent from this angle that it will be difficult for producers of any district to force more oil upon the pipe line companies than they require and any attempt to do so will undoubtedly be met with resistance that will eventually force operators to curtail.

Practically all sections of the state have filed numerous protests to the order, effective August 27, on the ground that sufficient time had not been granted in which to work out details of agreeable procedure. Thus, while it was assumed that the forces for curtailment were well organized throughout the state and ready to effect the desired reduction in output within a short time after August 27, it now appears that the carrying out of the commission's order, even though revised, will be fraught with many obstacles. While there will undoubtedly be a downward revision in crude output almost immediately, it is anticipated that the realization of the commission's order will be subjected to delays that will complicate matters to a marked degree. As Mr. Farish stated before the commission on Monday, August 25, "The oil industry today is conservation-minded and the movement to curtail over-production is world-wide." This statement is true of practically every oil producing state of the United States and also of the major producing areas of the world; the only conspicuous opposing factor being the state of Texas.

The big issue in Texas today is to establish equilibrium between crude supply and demand. That the situation in this state is far out of balance is plainly shown by analysis of production and consumption. Shifting the responsibility to the other fellow will not solve the over-production problem in Texas. Unless concerted action is taken to rigidly follow out the program of the railroad commission, Texas operators face even worse conditions than those from which the industry is trying to emerge. If the demand for Texas crude was as large as many operators painted it, prices would be higher today and there would be little need for proration in this state. Oklahoma and California operators have faced the same problems that confront the industry in Texas and the results obtained have proven the soundness of concerted curtailment action. It is up to the industry in Texas to follow the example set by Oklahoma and California, not only in the interests of conservation but in the interests of the industry itself.

Opposition Strenuous

So strenuous was the opposition voiced by Gulf Coast operators that it was necessary for the railroad commission to hold a special night meeting to determine whether or not a revision of the former order was necessary. It was pointed out that the demand for Gulf Coast oil is now so large as to necessitate withdrawals of oil from storage in this area. It was also pointed out that if Gulf Coast producers were forced to curtail, the deficient supply required from this area would undoubtedly be substituted by California or Venezuelan oil. By refraining from unnecessary drilling in several of the flush areas of the Gulf Coast, it has been proven that there has been a substantial, natural decline in production of those areas. For example, it was pointed out that Barbers Hill production has declined from about 30,000 barrels daily in April, 1930, to 16,000 barrels daily at the present time. In several instances, operators stated that the only reason any curtailment order had been allotted to the Gulf Coast was because this was the last district considered and was given an arbitrary reduction, without considering the facts.

It will be remembered that the first draft of the technical committee's recommendation showed that pipe line company nominations were slightly higher than actual production for the Gulf Coast. This was also cited as evidence that this area should not be placed on proration. As a result of this testimony, it was concluded by the commission that a 30-day respite would be granted to Gulf Coast operators, in order that they will be able to prove the fact that production is declining to the extent that the allotted figure of 150,000 barrels can be met within that time without resorting to immediate proration. What effect this will have upon other sections is problematical at this time. It is believed, however, that many operators will voice further protests against this action and will say that they also should have been granted some additional time.

All eyes will be on Texas during the next 30 days to see what effect the railroad commission's order will have upon the production curve of the state. Particularly will interest be centered upon the Gulf Coast area, since the movement to curtail unnecessary drilling offers a new angle to the curtailment question. It will however, be exceedingly difficult for the railroad commission to exercise any degree of supervision over this phase of curtailment, since the commission is not vested with the power to say whether or not a company has the right to drill a new well, especially when it can be proven that the drilling of such a well is obligatory. At any rate, the next 30 days will show whether or not it will be necessary to instigate another order setting a lower limit for production of this area. At present, maximum production will be set at present levels.

Get Gasser in Dakota at Sand Draw

Riverton, Wyoming.—Producers & Refiners Corporation has a 40,000,000-cubic foot gas well in the Dakota formation in the Sand Draw field 22 miles southeast of here. The gas is reported to be heavily saturated and is believed to be coming from a sand closely identified with petroleum. The pay was topped at 3460 feet. This is the fourth gas sand encountered in the field. A number of attempts have been made in past years to test the lower horizons in this field for oil, but were prevented from reaching lower sands because of the heavy gas pressure. Present test is being drilled with rotary.

Salt Creek Test Nears Granite

Casper.—Midwest Refining Company has about 100 feet more to drill to reach the granite in its deep test in the Salt Creek field. The location is near the center of the field and the well was started to test all formations. Hole is now bottomed at about 5400 feet with a flow of 4000 barrels of hot water testing 172° F. The test had good production in the Frontier sands, in the Dakota series, in the Sundance, and the Tensleep. Larger production was from the Sundance where it gauged 5000 barrels per day; well developed 3500 barrels in the Tensleep. This last named was of a combined paraffin and asphalt base.

Osage, Wyoming Field Extended West

Osage, Wyoming.—Lambie Oil Company and West Virginia Company, have completed Julius Bock 2, in the Osage oil field in Weston County, Eastern Wyoming. The well came in at 525 barrels initial and is still making more than 450 barrels per day. The new producer is on the western extension of the field and is considered a further extension to the old shallow pool. Oil is about 40 gravity.

News From California Fields

BRAD MILLS, *Staff Representative, Los Angeles, California*

California's Curtailment Has Proven Practical and Necessary

LOS ANGELES. — Ten months of partial and statewide curtailment California has demonstrated that conservation is both practical and necessary, despite failure of the industry to stage the rapid uphill climb pictured prior to the inauguration of the present reduced plan of production. Conflicting opinions concerning the speed of recovery of the oil industry from the low level of a year ago do not affect the importance and need of a definite curtailment program, and the mere fact that the potentials seem too high and certain fields are producing above their allowables should not prevent the state from holding production near the 600,000-barrel mark. After all, the allowable is a more significant basic factor than the potential, while actual production is more important than either.

Little has been heard of abandonment of the present curtailment program, which might normally expire November 1. It is requiring both individual and group effort to hold all fields in line but elimination of most of the bolder holdouts has simplified the problem. Certain fields have sparred for advantages, while individual operators in the various fields have protested their rights in no uncertain manner. The internal friction which caused drastic price reductions during the early stages of curtailment is absent in at least two of the critical fields and an improvement in the feeling among the committees has been noted.

The increase in state production does not reflect a healthy condition but certainly the climb will be checked before the program is endangered. The less optimistic conservation leaders pretend to see danger in the march upward, however, and agree that the total must come down A gradual increase seems more dangerous than a sudden rush upward and is more difficult to correct. Gains in two fields and continued over-production in a third have been responsible for the overage. The immediate outlook in two of these areas in none too encouraging.

Playa del Rey is the field most feared, due to inability to control townlot operations and the eagerness to complete wells on small leases. Little headway has been made in an effort to obtain signatures for the curtailment plan outlined, only a few of the larger companies appearing entirely willing to abide by any equitable plan formulated by special committees. Most of the operators in the townlot district are drilling only one well to the lease and it will require more than kind words to bring about a partial shut-in of flush producers where there is doubt as to the outcome of the field. A typical townlot spirit exists, with many of the small companies depending almost wholly upon the small leases in this field for their success or failure. The more stable companies might be handled, but until a more definite trend toward curtailment is shown by the one-well operators even the larger companies are reticent to commit themselves. Right now, the Playa del Rey field does not appear strong enough potentially or otherwise to upset the curtailment plan on merit, but the psychological effect of a field producing 100 per cent of its potential will not benefit the spirit of operators in other Los Angeles basin fields.

Expect Larger Production

A production of 30,000 barrels looked high for the peak soon after the discovery well was completed, but a much higher figure is possible. The field can now make in excess of 15,000 barrels, but the secretive nature of developments makes an accurate estimate out of the question. The oil is heavy and not desirable during a period of over-production. It contains considerable gasoline to offset the high sulphur content. There is still a belief among geologists that the field will not become a major factor, but, as mentioned previously, the danger from an unrestrained flow may offset failure to show a high potential. The field will extend over a large area and the drilling of perhaps 150 wells will be completed within a year. The next dozen completions will largely determine this number, however, and a few large producers might lead to a much larger drilling program than that now outlined. The oil is finding its way to market, via trucks and otherwise and is replacing what would be a normal market for an equal amount of lighter oil. Major companies did not want the oil at first, but are now planning to run a part of it through their own pipe lines. It refines easily for a heavy oil and the field may be more important than generally suspected.

Continued decrease in petroleum stocks held on the West Coast reflects an improvement which ordinarily would not be noticed on the surface. It is true that the peak demand of the summer months must make inroads into stocks if they are ever to be reduced, but a sharp drop in June followed by a decline of more than 2,000,000 barrels during July brought the total stock decrease for 1930, up to August 1, to 2,507,000 barrels. The decline is clearly not enough for 1930, amounting to no more than a good healthy decline for one month. Sharp advances during the first months of the year piled stocks up high before the curtailment program could be placed in effect. There is still some doubt concerning the trend of stocks during the winter months, but a lower allowable probably will be requested if the present level of production fails to reduce stocks during the coming months. Total stocks held in California amount to 182,255,945 barrels, as compared with 169,161,139 barrels on August 1 of 1929. Refinable crude stocks during July declined only 32,413 barrels, while heavy crude stocks tumbled 786,422 barrels and gasoline in storage dropped 665,346 barrels to 16,443,513 barrels. Total stocks are fully 50,000,000 barrels above a healthy level,

with total stocks of 100,000,000 barrels considered ample for all ordinary conditions. The heavy crude stocks include all grades of fuel oil. Several months ago much attention was given the question of stock reduction. Later it was obvious that curtailment of production would automatically reduce stocks.

Permits issued for new wells continue to trail the total of last year by a wide margin, despite a spurt of activity at Playa del Rey. Total new wells this year is 551, as compared with 866 at the same date in 1929. It will require much more than a run on one field to give 1930 a chance to show much better than during the eight months. The drop at Santa Fe Springs has so nearly approached zero on the decline curve that increased activity at Long Beach has fallen short as an offset. Other flush and semi-flush fields have recorded fewer permits, while wildcat activity has not played a very important role. Elwood, Ventura and the Midway district, to say nothing of Kettleman Hills, have shown declines over the number of wells started last year. Right now the estimate of 850 new wells for 1930 (made early in the year) does not seem far from correct, with a smaller number possible.

California as a part of a national unit is still recognized but the urgent telegraphing and writing back and forth between Mid-Continent and Gulf Coast and California conservation leaders has about been suspended. The Mid-Continent and Texas fields, and more recently those in New Mexico, have replaced California as the more acute spots and the Western state has assumed a more settled position.

Consider North Dome Extension Important

Coalinga, Calif.—Completion 10 days ago of Associated Oil Company's Whepley 1 as a 3000-barrel producer is regarded as a very important North Dome development at Kettleman Hills and further emphasizes the magnitude of the field. Located more than a mile north of the discovery well, the new producer helps to fill in a questionable gap, although Petroleum Securities Company's Felix 1 nearby indicated a flowing well. The nine-inch casing was cemented over the Temblor sand at 6860 feet and the well completed at 7904 feet, giving the new producer more than 1000 feet of oil sand and shale. The oil is much heavier than that produced from other wells on the North Dome, running about 51 gravity and showing a darker cast. Gas production has increased to 75,000,000 cubic feet. The well will be allowed to produce, since it is an indirect offset to a flowing well.

Petroleum Securities Company has passed 5750 feet in Felix 2 and should complete the well in record time. The formation is a hard brown shale. Superior Oil Company is drilling at 8110 feet in Huffman 1, but has not found the formation which is producing in Associated Oil Company's new well. A gradual increase in field operations is anticipated, recent developments having been favorable to additional field operations.

Lime Canyon Semi-Wildcat Successful

Ventura, Calif.—Bolsa Chica Oil Corporation has completed Snow 1-A, a semi-wildcat on the Lime Canyon dome near Piru, with an initial production of 275 barrels. The discovery or extension along the Temescal anticline is not being regarded as a major development. The well is flowing 24 gravity oil from a depth of 2497 feet, the 6¼-inch shut-off having been made at 2375 feet. A survey prior to location of Snow 1-A disclosed the lease to be within the producing limits of the structure. The well is located on a 60-acre lease which is capable of supporting three additional wells.

Activity in Playa del Rey to Continue for Another Month

LOS ANGELES.—The rush to obtain flush production at Playa del Rey (Venice) continues and the peak of field operations probably will not be reached for another month. Active drilling wells and locations have reached the high total of 100, with new locations far exceeding completions. The field has not yet demonstrated its ability to support such an enormous drilling program, despite completion of 18 wells of various sizes from 100 barrels to 3500 barrels.

Difficulty in finishing wells in both the shallow and deep sands has not dampened the enthusiasm of the average townlot operator who is forced to drill under the provisions of his lease. Early completions are reasonably assured of a profitable production, while late completions and "hangovers" probably will come in for the usual small flow which follows the loss of field head.

Bunching of wells in the townlot area is admittedly bad, but the usual hope exists that each will be first to develop a large production and where only one well is being drilled on a small lot the customary rush is in evidence.

There was hardly an outstanding development during the week, one small completion failing to throw additional light on the trend of production. Barnsdall Oil Company's Burks 3 came in with an initial flow of 400 barrels from 6075 feet but made a better showing on subsequent tests. Interest is divided between the upper and lower sands, but the trend is now definitely toward the latter. Delay probably will prove much more expensive than the offsetting qualities of the shallow sand, and for this reason operators in the townlot district are inclined toward a steady march to the lower level.

Ohio Oil Company has not been successful in its efforts to make steady producers of its edge tests, Dickenson 1 and Del Rey 2, the former being swabbed from 6505 feet and the latter showing sand from a total depth of 6678 feet. Completion of either well would extend the field and fill in gaps capable of supporting several wells. Discovery of the oil sand in these wells indicates that the axis runs north of the line originally suggested by geologists. The company's Recreation Gun Club tract is nearly all proven by developments on leases to the north. Extension of the activity into the town of Playa del Rey seems unlikely at this time. A large percentage of the property owners are anxious to change the regulations, but a recent opinion of state officials is unfavorable to drilling on and near public beaches. Present townlot activity is confined to a narrow strip south of the discovery well and paralleling the ocean. The present rush to drill will certainly be followed by a rapid decline in field operations, following the peak of production. The development is somewhat similar to that at Alamitos Heights during the boom there 3½ years ago, although sand conditions and the oil are radically different.

Expect Fewer Locations at Elwood

Santa Barbara, Calif.—Efforts to check drilling at Elwood probably will be reflected in fewer locations and a gradual tapering off of field operations. The bulk of recent drilling has been on tideland permits outside the mean high tide line and the field potential has become so high that further development is not warranted. Barnsdall Oil Company and Rio Grande Oil Company, joint operators and discoverers of the field, favor less activity in the field but are in a position to offset either on land or out in the ocean. Pacific Western Oil Company has been completing some remarkable wells on tideland permits and is contemplating drilling of tests near the outside end of the permit and about 4000 feet from the shore line. All companies are abiding by the curtailment agreement.

Hobbs' Potential Production Up 100,000 Barrels

HOBBS, New Mexico. — Potential production of the Hobbs field was increased approximately 100,000 barrels during the past week through the completion of another large quota of big wells in the 4200-foot lime horizon, including a new record producer in the heart of the flush area. Gypsy Oil Company's W. D. Grimes 3 established the new mark for initial production through having flowed 1209 barrels clean oil per hour, with an estimated daily flow of 15,000,000 cubic feet of gas. The field now has 50 completed wells with a combined daily potential estimated at approximately 400,000 barrels, and is producing 32,250 barrels daily during the August 15 to 31 proration period.

Gypsy Oil Company's Grimes 3 logged oil saturated lime at 3975 to 4155 feet after having set seven-inch casing at 3950 feet. The usual field practice of suspending a string of three-inch tubing in the hole before allowing the well to blow in was followed in making this completion, but the initial gauge was taken through casing and tubing. This well is located 2310 feet north and east of the SWc W½ Section 32-18s-38e. Gypsy Oil Company's Grimes 2, two locations north of the record well, was completed late last week, having made 853 barrels oil during first hour at 3982-4150 feet. Midwest Refining Company's State 8, Section 4, earned an initial production of 19,853 barrels oil and 15,000,000 cubic feet of gas, based on brief open-flow test when completed at 4026-4175 feet. The latter company opened the field, and is scheduled to become the ranking oil producer beginning with the next proration period.

Completions are being scored in greater numbers than new locations are made, thus causing the predicted decline in actual drilling operations in the Hobbs field. A survey of field work early this week developed a total of 59 tests underway; seven derricks and rigs; and five live locations, making a total of 71 operations. Three weeks previous there were 67 tests underway and 15 derricks, rigs and locations. This slump is attributed to the absence of any important extensions to the producing area, and will be checked to some extent early in September, as approaching completions on outpost locations will force considerable new development.

Gypsy Oil Company's Warren Graham 1, SEc NE Section 24-18s-37e, the most interesting outpost test, is located about one-half mile north by west of the field, and is logging all key formations high on structure. This test indicates that the flush oil section of Hobbs will continue considerable more distance in a northwest trend, and a successful completion will be followed by other lease owners stepping out with locations along the same trend. Graham 1 logged first anhydrite at 1440 feet, and the salt formation at 1620 to 2640 feet, while first brown lime was reported at 2818 feet. The usual shallow oil and gas showings appeared at 3200 feet, and early this week drilling was underway below the 3300-foot level. Companies holding the three off-sets to this test are trailing close behind with their drilling.

Midwest Refining Company is going to make a try for an east extension opposite the center of the Hobbs field through having staked location for Turner 29, which is located 660 feet out of the SWc Section 34-18s-38e, and in the town of Hobbs. This company owns all off-sets, but a successful completion would probably result in Continental Oil Company and Gypsy Oil Company drilling on their nearby units. One mile east of Turner 29, Hobbs-High, Inc. is preparing to resume drilling on Tatum 1, which has been shutdown at 3805 feet for a drilling line. It is reported that Gypsy Oil Company has given assistance to assure the completion of the test.

Production Increase Likely

Although production in the Hobbs area is now a few thousand barrels below the 35,000 barrel quota fixed as a minimum when proration was adopted on July 10, it is likely to increase considerably during September because of larger production allowances being earned by companies that take their own oil. Gypsy Oil Company has provided a private market outlet for its production by delivering same to Humble Pipe Line Company for common carrier movement to Wink, Texas, where the oil is turned into tanks of Gulf Pipe Line Company. Tidal Oil Company will have a second completion early in September, and will thereby contribute to the field's total outlet. The latter company's oil is gathered by Tidal Refining Company, and turned into tanks of Atlantic Pipe Line Company for common carrier movement to the Gulf Coast. Tidal Refining Company also has option to take and purchase 1000 barrels daily each from leases of Continental Oil Company and Shell Petroleum Corporation in connection with the latter two concerns having been awarded a natural gas contract for their plant on the McKinley farm by Tidal Oil Company. The Texas Company is a third producer in the field that will add to the output of the field through having arranged to accept its own production quota by making use of Shell Pipe Line Company's stub line. Gypsy Oil Company, Tidal Oil Company and The Texas Company do not nominate crude purchases, but take their own oil, thus permitting the three pipe line companies in the field to take more oil from other producers in filling their oil nominations.

Magnolia Pipe Line Company has completed survey work on its proposed pipe line extension from Winkler County, Texas, to the Hobbs field, but has dropped the project for the time being. Construction of this line may be contingent upon materilization of promised common carrier business, and completion of a big well on the Vacuum Oil Company's Berry 160-acre lease. Properties of the latter company are likely to be turned over to Magnolia Petroleum Company should its merger with Standard Oil Company of New York be consummated. Entrance of Gulf Pipe Line Company into Hobbs with an extension line from Winkler County, Texas, is not a remote possibility, since Gypsy Oil Company is in line to become one of the largest producers in the field. Gypsy Oil Company is already assured an ultimate crude recovery in the field to justify such a pipe line extension.

Louisiana--Arkansas Field Notes

Possible New Gas Area Indicated In Northwest Arkansas

SHREVEPORT.—Northwest Arkansas may add a new gas field and the deepest oil or gas production so far obtained in that state, it was indicated August 23, when Red Bank Oil Company's Hamm 1, 660 feet north of the center of Section 33-10n-26w, Franklin County, Arkansas, a wildcat, blew in at top of a sand at total depth of 3752 feet, making an estimated gas yield of from 3,000,000 to 4,000,000 cubic feet. The well was quickly brought under control and 6⅝-inch casing will be set. The test is a cable tool job, as are practically all those in Northwest Arkansas.

Deepest production so far found in Arkansas is in the recently opened Urbana oil field of Union County, where production is found at the 3500-foot level. Gas in Sebastian County, the nearest production to Hamm 1, is found at the 2900-3000-foot horizon.

The week ending August 23, was unusually quiet in both North Louisiana and Arkansas. The drought hampering drilling activity in several districts and at a number of wildcat tests, approximately 25 drilling operations are shut down in North Louisiana due to lack of water.

Hope of extending the upper Trinity gas producing field of Sugar Creek, Claiborne Parish, Louisiana, where there are now two commercial gassers making a gas heavily loaded with gasoline, 10 miles northeast into Lincoln Parish, was given a set-back when Arkansas Fuel Oil Company's Lewis & Company 1, Section 26-20-4w, tested 1000 feet of salt water without a show of oil or gas at total depth of 4292 feet, 6⅝-inch casing having been cemented at 4234 feet after a show of oil, gas and fresh water was obtained in a drill stem test.

Zwolle also saw the finish of the last deep test that had been under way there when Loring Oil Company junked Peavy-Wilson 1, Section 21-6-13, Sabine Parish, six miles southeast of west Zwolle production, at total depth of 4792 feet, after drill stem hung on a boulder just below surface casing. However, Magnolia Petroleum Company probably will make a deep test of Giaque 1, Section 26-7-14, two miles south of west Zwolle production, having set 12½-inch casing at 1197 feet. This well is checking low in relation to Zwolle west field production as the Giaque 1, August 22, was drilling hard black shale at 2203 feet, and had not picked up the Nacatosh, Marlbrook marl nor chalk rock which is encountered around 2130-50 feet in west Zwolle.

In Miller County, Arkansas, Lenz and associates who recently standardized Johnson 1, Section 24-15-26, completed at total depth of 2847 feet, probably in the lower Woodbine, claim the well is pumping 376 barrels of oil daily. The best it ever did before standardization was 61 barrels of oil daily. None of the major companies has made any locations yet in that territory and only one so far as is known, Magnolia Petroleum Company, has bought any acreage. It acquired slightly over 300 acres. Lenz and associates are cleaning out Dale 1, SE NW Section 25-15-26, an old test drilled several years ago to total depth of 2842 feet, preparatory to deepening it. Ten-inch casing was set at 85 feet. Only a few more feet would be required to pick up the sand encountered in Johnson 1, if there is no lenticularity.

Zwolle east field continues to gain in new activity despite a shortage of water at some operations. Five new locations were made besides an offset which may develop into the best well of the entire Zwolle area, Pelican Natural Gas Company's Louisiana Long Leaf 3, Section 4-7-11, a recent four-mile southeast extension. Rigging up is under way on the offset. The same company bailed dry in Sabine Lumber Company 3, Section 6-7-11, two miles to the west, at 2337 feet and the test has been deepened to 2408 feet in chalk where it was bailing to test August 23. Elevation of this test is 259.9 feet and Marlbrook marl was topped at 2225 feet, six-inch casing being set three feet above that point. Considerable play is being given in leasing and royalty trading between the four-mile extension and the producing Zwolle east field. As soon as water is available W. M. Coats will drill in Collins 1, Section 28-9-10, Natchitoches Parish, at total depth of 2270 feet, 12 miles northeast of Zwolle production. This well checked 70 feet higher than Zwolle tests and has a similar formation at bottom of the hole.

De Soto Wildcats Promising

Two semi-wildcat tests in different parts of De Soto Parish, Louisiana, showed possibilities of making oil wells. Joe Burnham and associates' Hood 1, Section 30-11-14, in the neighborhood of the old Spider district, encountered four feet of sand and what operators said was a good show of oil at total depth of 2356 feet. Six and five-eighths-inch casing will be set at 2330 feet as soon as the boiler at the well which blew up without hurting anyone, is replaced. In the same parish, but three miles southwest of the little Holly field, Pelham and Bundy are setting 6⅝-inch casing at 2800 feet in Rhodes 1, Section 32-13-14, after testing oil through drill stem from 2817 to 2892 feet. Prairie Oil & Gas Company is checking the 75,000-acre block of holdings of the late T. B. Slick in Claiborne Parish. United Gas Company has just completed blocking 6000 acres centering around Sections 6 and 7-20-4w, Claiborne and Lincoln Parishes. Louisiana Gas & Fuel Company is blocking 5000 acres in south De Soto Parish centering in townships 11 and 12 and ranges 12 and 13w. A test to a depth of at least 3000 feet is planned on the block.

In Marion County, Texas, Deep Rock Oil Company has acquired a half interest in Hussey and associates' Trammell 1, Charles Lockhart Survey, and the surrounding block of leases for a consideration of $6000, said to have been paid in cash. In Bowie County, Texas, bordering Miller County, Arkansas, on the west Joe Burnham and associates have made location for G. W. Burnett 1, M. H. James Survey. M. V. Fitzwater and associates have taken an option on 320 acres in SW Section 36-15-26 and NW Section 1-16-26, Miller County, Arkansas, until September 1 from Dr. E. L. Beck and Dr. R. H. T. Mann. The consideration if the sale is made is to be $10,000 the major part to be paid from production.

Two wildcat tests in Arkansas were among the week's failures. Tidal Oil Company abandoned Arkansas Timber 1, Section 3-16-14, Calhoun County, several miles east of Champagnolle production, as a dry hole at total depth of 3507 feet in streaks of sandy shale and red beds. J. C. Marcum did not plug back in McCurry 1, Section 10-19-4, Ashley County, and abandoned the test as a salt water hole at 3555 feet.

Arkansas Louisiana Pipe Line Company after getting several good gassers in both Blossom and Woodbine horizons in the new Bisteneau gas area of Bienville Parish hit a salt water hole in Graves 1, Section 22-16-10 and abandoned it at total depth of 2620 feet. There was a show of oil with the water. Thirteen new locations were made in North Louisiana during the week ending August 23. Lenz and associates' workover of Dale 1 in Miller County and a new test in Sebastian County, Ozark Natural Gas Company's Bates 1, SE NW Section 28-8-30, comprised the new work for that state.

A windstorm for the second time in the last few weeks hit the Urania oil fields in LaSalle Parish, Louisiana, on August 18 and leveled 10 derricks. Four belonged to Arkansas Natural Gas Company, four to H. L. Hunt, Inc., one to Tullos Oil Company and one to Louisiana Oil Refining Corporation.

Texas Proration Launched by Efficient Committee Organization

(*Continued from page* 42)

pledged themselves to stop all drilling except what is absolutely necessary.

Barbers Hill activity will likewise be limited. That field, it was pointed out in a meeting for proration purposes, declined 1600 barrels daily in the previous two weeks.

James Hutcheson, vice-president and general manager of Rio Bravo Oil Company, head of the committee on Pierce Junction curtailment, said late last week that he believed that insofar as that field was concerned the proration schedule would succeed. He said that his company brought in a well last week which was rated at 10,000 to 12,000 barrels daily capacity; that it made 285 barrels per hour on a one-half-inch choke; that it was choked down more, to 180 barrels per hour on less than a quarter-inch choke, with pressure running around 650 pounds. He said that Rio Bravo Oil Company shut in 1800 barrels production from pumping wells in the field, shut down its air plant, and that this evidence of good faith in curtailment has had good effect on other operators there.

Following his appointment as chairman of Coastal operators by the Railroad Commission, Mr. Murphy week before last appointed chairmen for committees of five for each of 33 fields, and each chairman was asked to name four other operators to associate with him in investigating the conditions of the field. There was ready response to the call for cooperation, and within a short time the numerous committees were gathering data and information affecting curtailment in their fields.

For the benefit of the committeemen working on the conservation plan a general analysis of the condition of the various fields was made by Mr. Murphy, and a table of producing wells and drilling operations by fields was sent out. The report shows that aside from Pettus and Refugio, structural fields included along with the salt domes of the Gulf Coast for conservation purposes, the most active fields are Barbers Hill, with 31 drilling operations, and Humble, 17 operations. Pumping wells in the 31 fields number 2451, with daily production of 76,214 barrels, while there were 176 flowing wells with daily yield of 64,835 barrels. In regard to the pumping wells a statement accompanying the table said: "We recognize that in many of the older fields in the Gulf Coast no proration method or curtailment is practicable on account of the age of the wells, the large amount of water to be produced in comparison with the small amount of oil, and that closing in or retarding the production would result in the loss of the wells."

Following is a complete list of committee chairmen appointed by Mr. Murphy for the different fields:

Allen Dome: H. F. Montgomery, Mills Bennett Production Company.

Barbers Hill: S. A. Judson, Humphreys Corporation.

Batson, Boling, Port Neches, Sour Lake: F. C. Sealey, The Texas Company.

Blue Ridge, Big Creek, Fannett, Hankamer, High Island, Orchard: John Tucker, Gulf Production Company.

Brenham: Butler & Calhoun.

Damon Mound: B. G. Von Roeder, Sinclair Oil & Gas Company.

Esperson: Harry Reynolds, Cranfill-Reynolds Company.

Goose Creek, Humble, Moss Bluff, Raccoon Bend, Sugar Land, West Columbia: Dave Harris, Humble Oil & Refining Company.

Hull: C. A. Russell, Republic Production Company.

Lost Lake: C. E. Sutton, Pure Oil Company.

Markham, Nash: Adrian Moore, Rycade Oil Corporation.

North Dayton: Elwood Fouts, Abercrombie and Harrison.

Orange, South Liberty: R. W. Pack, Sun Oil Company.

Pierce Junction, Saratoga: James Hutcheson, Rio Bravo Oil Company.

Refugio, Pettus: R. H. Hargrove, Union Producing Company.

Spindle Top: Judge Beaman Strong, Yount-Lee Oil Company.

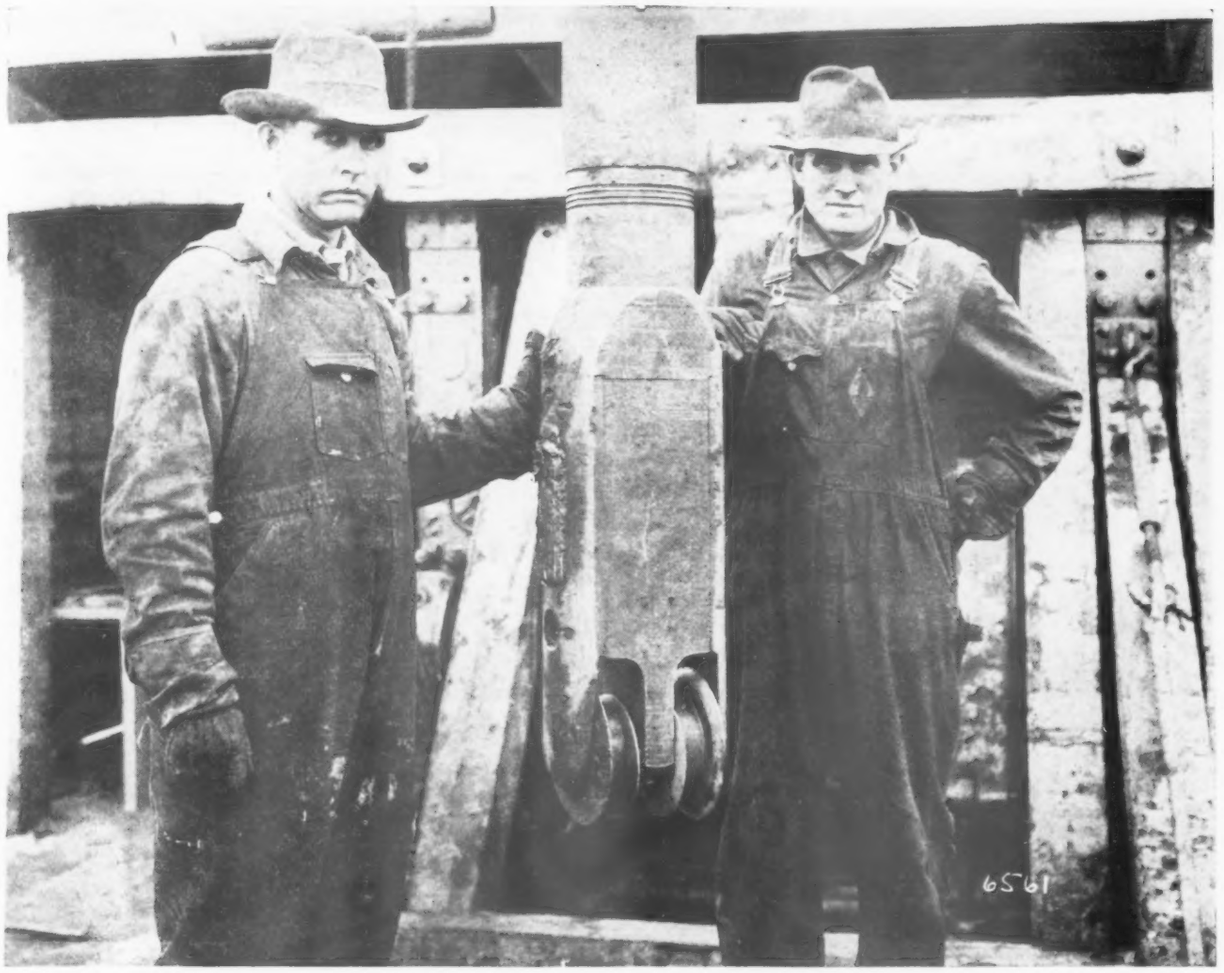
South and Southwest Texas

F. C. Sealey of Houston, assistant to the manager of the South Texas Division of The Texas Company, in addition to serving as head of several field committees in the Gulf Coast, has been general chairman in charge of the curtailment program for Southwest Texas, including the counties of Caldwell, Bexar, Atascosa, Guadalupe, Bastrop, Williamson, Milam, Medina, Live Oak, McMullen, Webb, Duval, Jim Hogg and Zapata. Principal flush or semi-flush fields in that district include Darst Creek, Guadalupe County, Salt Flat, Caldwell County, and the Chapman field, Williamson County. Information on what was accomplished in Williamson County is given in another part of this article. Darst Creek production has already been cut to 42,004 barrels daily, or about 27 per cent of its potential, and Salt Flat is on a proration schedule limiting output to less than 17,000 barrels, or 80 per cent of the potential. O. W. Killam, independent operator of Laredo, was placed at the head of the proposed curtailment program in the Mirando district, but late last week he had not communicated with Mr. Sealey as to whether he was furthering the program.

STATUS OF COAST FIELDS JULY 29*

Field—	Flowing Wells	Flowing Prod.	Pumping Wells	Pumping Prod.	Total Wells	Total Prod.	Drilling, work over, rigging up wells
Allen Dome	..	....	2	60	2	60	3
Barbers Hill	10	6047	118	12,528	128	18,575	31
Batson	..	....	285	1,200	285	1,200	..
Big Creek	2	2300	30	1,858	32	4,158	2
Blue Ridge	..	....	74	1,600	74	1,600	2
Boling	..	....	81	1,164	81	1,164	3
Brenham	..	....	38	138	38	138	2
Damon Mound	..	....	26	708	26	708	1
Esperson	2	550	13	1,783	15	2,333	4
Fannett	1	460	3	442	4	902	1
Goose Creek	1	60	186	4,647	187	4,707	1
Hankamer	7	2914	1	80	8	2,994	3
High Island	4	850	7	250	11	1,100	3
Hull	13	1850	237	6,340	250	8,190	4
Humble	20	13,150	234	6,347	254	19,497	17
Lost Lake	..	....	5	375	5	375	1
Markham	..	....	6	394	6	394	..
Moss Bluff	2	....	..	....	2	....	3
Nash Dome	..	....	13	305	13	305	2
North Dayton	4	1145	2	626	6	1,771	3
Orange	1	60	99	2,057	100	2,117	1
Orchard	2	1908	3	100	5	2,008	2
Pierce Junction	15	5633	76	6,446	91	12,079	6
Port Neches	3	1965	1	263	4	4,228	3
Raccoon Bend	28	7705	50	4,000	78	11,705	3
Saratoga	..	....	207	1,015	207	1,015	..
Sour Lake	..	....	226	2,196	226	2,196	1
South Liberty	2	377	128	3,395	130	3,772	2
Spindle Top	18	6482	206	10,115	224	16,597	5
Sugar Land	36	11,427	2	381	38	11,808	1
West Columbia	5	32	92	5,401	97	5,453	1
Total	176	64,835	2451	76,214	2627	141,149	111

*Not including Refugio and Pettus.



"THE FASTEST HOLE-MAKING BIT I EVER SAW"

That is what L. O. Ward (left) of the Oklahoma City Field, says about the Guiberson Four-Disc Reaming Rotary Bit. Drillers everywhere concur in this opinion. When asked to describe the Guiberson Disc Bit, the first thing that enters their minds is speed - - - and they say it with an exclamation point.

The Guiberson Four-Disc Reaming Rotary Bit, while noted for speed, is likewise celebrated for straightness of hole, having gone down thousands of feet without deviating a fraction from the vertical. While not intended as a hard-rock bit, the Guiberson Disc Bit cuts through intervening shells, obviating the necessity of pulling out, to change bits. Four discs cut up material in bottom of well more finely and make it easier to flush from well. Another thing that L. O. Ward says is that the Guiberson Disc Bit "does not ball up or stop circulation."

In this day of records of all kinds - - - endurance, speed, volume and countless others, the Guiberson Disc Bit is doing its part in drilling and winning new laurels in every field it enters. Contractors in large numbers now specify this bit as standard equipment.

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GUIBERSON

BETTER BE SAFE THAN SORRY

Crude Oil Price Quotations

(Revised to August 26, 1930)

CRUDE PRICE CHANGES

Effective August 21, Humble Oil and Refining Company reduced posted price of Pettus, Gulf Coast, oil from $1.40 to $1.15 a barrel.

Effective August 22, Bradford, Pennsylvania, crude was advanced 35 cents a barrel; National Transit, Southwest and Eureka Pipe Line oil was advanced 25 cents a barrel.

EASTERN STATES

(Effective August 22, 1930)

*Bradford Grade	$2.40
Penn Grade Oil in National Transit Lines (Pennsylvania)	2.35
Penn Grade Oil in Southwest Pennsylvania Lines (Penna.)	2.30
Penn Grade Oil in Eureka Pipe Line Lines (West Virginia)	2.20
Penna Grade Oil in Buckeye Pipe Line Lines (Ohio)	1.80
Cabell Grade Oil in Eureka Pipe Line Lines (West Virginia)	1.55
Corning 35-cent Grade Oil in Buckeye Pipe Line Co.'s Lines	1.30
Corning 25-cent Grade Oil in Buckeye Pipe Line Co.'s Lines	1.50
Somerset Oil in Cumberland Pipe Line Lines (Kentucky)	1.37
Ragland Grade Oil in Cumberland Pipe Line Lines (Kentucky) (Effective Jan. 29, 1929)	.60
Wayne Dist. Oil in Cumberland Pipe Lines	1.24

*Posted by Tidewater Pipe Company.

CENTRAL STATES

(Effective June 26, 1930)
Posted by Ohio Oil Company

Illinois	$1.65
Indiana	1.32
Lima	1.55
Plymouth	1.23
Princeton	1.65
Wooster	1.65

WESTERN KENTUCKY

All grades	1.55

OKLAHOMA-KANSAS

(Effective April 10, 1930)

Below 25 gravity	$ .70
25 to 25.9 gravity	.70
26 to 26.9 gravity	.76
27 to 27.9 gravity	.82
28 to 28.9 gravity	.88
29 to 29.9 gravity	.95
30 to 30.9 gravity	1.02
31 to 31.9 gravity	1.10
32 to 32.9 gravity	1.15
33 to 33.9 gravity	1.185
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.255
36 to 36.9 gravity	1.29
37 to 37.9 gravity	1.325
38 to 38.9 gravity	1.36
39 to 39.9 gravity	1.395
40 to 40.9 gravity	1.43
41 to 41.9 gravity	1.465
42 to 42.9 gravity	1.50
43 to 43.9 gravity	1.535
44 and above	1.57

PANHANDLE

(Effective April 10, 1930)

GRAY COUNTY

Below 29 gravity	.755
29 to 29.9 gravity	.805
30 to 30.9 gravity	.855
31 to 31.9 gravity	.905
32 to 32.9 gravity	.955
33 to 33.9 gravity	1.005
34 to 34.9 gravity	1.055
35 to 35.9 gravity	1.09
36 to 36.9 gravity	1.125
37 to 37.9 gravity	1.16
38 to 38.9 gravity	1.195
39 to 39.9 gravity	1.23
40 to 40.9 gravity	1.265
41 to 41.9 gravity	1.30
42 to 42.9 gravity	1.335
43 to 43.9 gravity	1.37
44 and above	1.405

CARSON-HUTCHINSON COUNTIES

Below 32 gravity	$ .775
32 to 32.9 gravity	.825
33 to 33.9 gravity	.875
34 to 34.9 gravity	.925
35 to 35.9 gravity	.965
36 to 36.9 gravity	.995
37 to 37.9 gravity	1.03
38 to 38.9 gravity	1.065
39 to 39.9 gravity	1.10
40 to 40.9 gravity	1.135
41 to 41.9 gravity	1.17
42 to 42.9 gravity	1.205
43 to 43.9 gravity	1.24
44 and above	1.275

WHEELER COUNTY

Below 30 gravity	$ .755
30 to 30.9 gravity	.805
31 to 31.9 gravity	.855
32 to 32.9 gravity	.905
33 to 33.9 gravity	.955
34 to 34.9 gravity	1.005
35 to 35.9 gravity	1.04
36 to 36.9 gravity	1.075
37 to 37.9 gravity	1.11
38 to 38.9 gravity	1.145
39 to 39.9 gravity	1.18
40 to 40.9 gravity	1.215
41 to 41.9 gravity	1.25
42 to 42.9 gravity	1.285
43 to 43.9 gravity	1.32
44 and above	1.355

WEST TEXAS

(Effective April 10, 1930)

Crane-Upton, Crockett, Ector, Howard, Pecos and Winkler Counties and Lea County, N. Mex.

Below 25 gravity	$ .65
25 to 25.9 gravity	.68
26 to 26.9 gravity	.71
27 to 27.9 gravity	.74
28 to 28.9 gravity	.77
29 to 29.9 gravity	.80
30 to 30.9 gravity	.83
31 to 31.9 gravity	.86
32 to 32.9 gravity	.89

CALIFORNIA CRUDE OIL PRICES AT THE WELL

(EFFECTIVE JUNE 14, 1930)

Following are the current prices offered by Standard Oil Company for crude oil at the wells; (Price per barrel of 42 gallons in fields indicated)

Gravity	Ventura*	Signal Hills	Alamitos Heights Seal Beach	Huntington Beach	Inglewood	Olinda-Brea Canon	Athens-Rosecrans Dominguez	Elwood Terrace	Torrance	Richfield	Whittier La Habra	Montebello	Coyote Hills	Santa Fe Springs	Newhall McKittrick Kern River	Midway-Sunset Elk Hills	Buena Vista Hills	Lost Hills	Coalinga	Wheeler Ridge
14-14.9	$ .70	$ .70	$ .70	$ .70	$ .70	$ .70	$ ..	$ ..	$ .70	$ .70	$ .70	$ .70	$ .70	..	$ .55	$ .55	$ .55	$ .55	$ .55	$ .55
15-15.9	.70	.70	.70	.70	.70	.70	..	..	.70	.70	.70	.70	.70	..	.55	.55	.55	.55	.55	.55
16-16.9	.70	.70	.70	.70	.70	.70	..	..	.70	.70	.70	.70	.70	..	.55	.55	.55	.55	.55	.55
17-17.9	.70	.70	.70	.70	.70	.70	..	..	.70	.70	.70	.70	.70	..	.55	.55	.55	.55	.55	.55
18-18.9	.75	.76	.76	.76	.76	.76	..	..	.76	.76	.76	.71	.76	..	.55	.62	.62	.62	.62	.62
19-19.9	.80	.82	.82	.82	.82	.82	..	..	.82	.82	.82	.77	.82	..	.55	.70	.70	.70	.70	.70
20-20.9	.85	.88	.88	.88	.88	.88	..	..	.88	.88	.87	.83	.87	..	..	.78	.78	.78	.78	.78
21-21.9	.90	.94	.94	.94	.94	.94	..	..	.94	.94	.93	.90	.93	.92	..	.86	.86	.86	.86	.86
22-22.9	.97	1.00	1.00	1.00	1.00	1.00	..	..	1.00	1.00	.98	.97	.98	.95	..	.94	.94	.94	.94	.94
23-23.9	1.05	1.07	1.07	1.07	1.07	1.07	..	..	1.07	1.07	..	1.05	1.04	1.01	..	1.02	1.02	1.02	1.02	1.02
24-24.9	1.08	1.14	1.14	1.14	1.14	1.14	1.14	..	1.14	1.14	..	1.11	1.10	1.07	..	1.09	1.09	1.09	1.07	1.07
25-25.9	1.13	1.21	1.21	1.21	1.21	1.21	1.19	..	1.21	1.21	..	1.17	1.16	1.13	..	1.16	1.16	1.16	1.12	1.12
26-26.9	1.18	1.28	1.28	1.28	1.28	1.28	1.24	..	1.28	1.28	..	1.23	1.23	1.19	..	1.23	1.23	1.23	1.17	1.17
27-27.9	1.23	1.35	1.35	1.35	1.35	1.35	1.29	..	1.35	1.35	..	1.29	1.30	1.25	..	1.30	1.30	1.30	1.23	1.22
28-28.9	1.28	1.42	1.42	1.42	1.42	1.42	1.34	..	1.42	1.42	..	1.35	1.37	1.31	..	1.35	1.35	1.35	1.27	..
29-29.9	1.33	1.46	1.46	1.46	..	1.46	1.39	..	..	1.46	..	1.38	1.41	1.37	..	1.41	1.41	1.41	1.31	..
30-30.9	1.39	1.50	1.50	1.50	..	1.50	1.45	..	..	1.50	..	1.41	1.45	1.43	..	1.47	1.47	1.47	1.35	..
31-31.9	1.45	1.55	1.55	1.55	..	1.55	1.51	..	..	..	..	..	..	1.49	..	1.53	1.53	1.53	1.39	..
32-32.9	1.51	1.60	1.60	1.60	..	..	1.57	..	..	..	..	..	..	1.55	..	1.59	1.59	1.59	1.43	..
33-33.9	1.58	..	..	..	..	..	1.64	..	..	..	..	..	..	1.60	..	1.65	1.65	1.65	1.47	..
34-34.9	..	..	..	..	..	..	1.71	1.32	..	..	..	..	..	1.65	..	..	..	1.71	1.51	..
35-35.9	..	..	..	..	..	..	1.78	1.39	..	..	..	..	..	1.70	..	..	..	1.77	1.55	..
36-36.9	..	..	..	..	..	..	1.84	1.46	..	..	..	..	..	1.75	..	..	..	..	..	..
37-37.9	..	..	..	..	..	..	1.90	1.53	..	..	..	..	..	1.80	..	..	..	..	..	..
38-38.9	..	..	..	..	..	..	1.96	1.60	..	..	..	..	..	1.85	..	..	..	..	..	..
39-39.9	..	..	..	..	..	..	2.02	1.66	..	..	..	..	..	1.90	..	..	..	..	..	..
40-40.9	..	..	..	..	..	..	2.08	1.72	..											
41-41.9	..	..	..	..	..	..	2.14	1.78	..											
42-42.9	..	..	..	..	..	..	2.20	1.84	..											

KETTLEMAN HILLS—55 degrees Gravity and above 1.65 per barrel. *Union Oil Company.
General Petroleum Posts following prices 11-39.9 Gr. 50c, 14-22.9 55c at Kern Front, Fruitvale, Mt. Poso Creek and Rd. Mountain districts.

(See page 88)

Marketing methods have changed, too! *Sell*

SINCLAIR THREE-GAS SERVICE

There are today so many different types of engines —and so many different driving conditions in traffic and in the open—that one kind of gasoline today cannot be *exactly right* for *all* cars, and for *all* needs. It takes *three* different gasolines to meet all motoring demands, and wise motorists will buy their gas where they can *choose* from these three and get superior engine performance—give your trade these three and build increased gallonage.

Here's *Sinclair Aircraft Gasoline*, the *Ace* of high test gasolines, for the motorist who wants quick getaway, flashy acceleration and brilliant road performance. Sinclair Aircraft is the Ace of high test gasolines because it is specially manufactured at Sinclair Refineries, meeting the requirements of the Federal Specifications Board for Aviation Gasoline—domestic grade—and gives sustained power. Due to its careful fractionation it is free from dissolved gases which cause gas locks, uneven distribution, galloping and engine balk.

Here's *Sinclair H-C Gasoline* for those who want high compression performance—*who want to stop knocks and keep them stopped*—all gasoline, nothing added!

And here's *Sinclair Regular Gasoline* for those who prefer to pay three cents less per gallon and yet get gas that is full of eager power. The quality gasoline at a popular price! Sell Sinclair Three-Gas Service—get the jump on competition and earn a jump in gallonage.

SINCLAIR REFINING COMPANY, INC., 45 Nassau Street, New York—*Atlanta, Chicago, Houston, Kansas City*

CRUDE OIL PRICE QUOTATIONS *Continued from Page 86*

33 to 33.9 gravity ..... .92
34 to 34.9 gravity ..... .95
35 to 35.9 gravity ..... .98
36 and above 1.01

Magnolia Petroleum Company posts in Crane, Upton and Winkler Counties. Southern Crude Oil Purchasing Company posts only in Crane, Upton and Winkler Counties.

HOWARD AND GLASSCOCK COUNTY CRUDE

(Effective April 10, 1930)

Below 25 gravity .....$ .65
25 to 25.9 gravity ..... .68
26 to 26.9 gravity ..... .71
27 to 27.9 gravity ..... .74
28 to 28.9 gravity ..... .76
29 to 29.9 gravity ..... .78
30 to 30.9 gravity ..... .80
31 to 31.9 gravity ..... .82
32 to 32.9 gravity ..... .84
33 to 33.9 gravity ..... .86
34 to 34.9 gravity ..... .88
35 to 35.9 gravity ..... .90
36 and above ..... .92

MARKHAM

The Texas Company

(Effective April 11, 1930)

All grades .....$ .85

CORSICANA HEAVY

All grades .....$ .80

SALT FLAT AND DARST CREEK

All grades $1.15

SOUTH TEXAS

Mirando .....$ .85
Luling ..... .85

NORTH AND CENTRAL TEXAS

(Effective April 10, 1930)

Ranger, North Texas, Mexia, Powell, Richland, Wortham, Currie, Moran, Nocona, Lytton Springs, and Van*

Below 25 gravity .....$ .72
25 to 25.9 gravity ..... .77
26 to 26.9 gravity ..... .82
27 to 27.9 gravity ..... .87
28 to 28.9 gravity ..... .92
29 to 29.9 gravity ..... .97
30 to 30.9 gravity 1.02
31 to 31.9 gravity 1.07
32 to 32.9 gravity 1.12
33 to 33.9 gravity 1.17
34 to 34.9 gravity 1.22
35 to 35.9 gravity 1.255
36 to 36.9 gravity 1.29
37 to 37.9 gravity 1.325
38 to 38.9 gravity 1.36
39 to 39.9 gravity 1.395
40 to 40.9 gravity 1.43
41 to 41.9 gravity 1.465
42 to 42.9 gravity 1.50
43 to 43.9 gravity 1.535
44 and above 1.57

*Pure Oil Company, July 9, 1930.

GULF COAST

(Effective April 10, 1930)

Grade "A" all companies $1.15

Grade "B"

Below 25 gravity $1.00
25 to 25.9 gravity 1.03
26 to 26.9 gravity 1.06
27 to 27.9 gravity 1.09
28 to 28.9 gravity 1.12
29 to 29.9 gravity 1.15
30 to 30.9 gravity 1.18
31 to 31.9 gravity 1.21
32 to 32.9 gravity 1.24
33 to 33.9 gravity 1.27
34 to 34.9 gravity 1.30
35 to 35.9 gravity 1.33
36 to 36.9 gravity 1.36
37 to 37.9 gravity 1.39

CLASSIFICATIONS OF GULF COAST CRUDE

The Texas Company: GRADE A—Beaume gravity not over 26.0 degrees at 60 degrees Fahrenheit; sulphur not over 0.5 per cent; in distilling 500 cc. of the crude that part of the distillate cut between 65 per cent off and 85 per cent off shall have a pour test of zero or lower. GRADE B—All Gulf Coast heavy crudes which do not meet tests for Grade "A" or for Gulf Coast light.

Humble Oil & Refining Company: GRADE A—All crude conforming to the following tests: viscosity not less than 100 seconds Saybolt at 100 degrees Fahrenheit; sulphur not over .4 per cent; Beaume gravity not over 25 at 60 degrees Fahrenheit. Cold tests of distillates having a viscosity of 1000 seconds at 100 degrees Fahrenheit shall not be over 5 degrees Fahrenheit. GRADE B—Embraces all Coastal crude which does not meet the tests for "A" grade crude.

Gulf Pipe Line Company: GRADE A—Beaume gravity not over 24 at 60 degrees Fahrenheit; viscosity not less than 100 seconds universal Saybolt at 100 degrees Fahrenheit; and sulphur not over 0.4 per cent. The yield of 250 viscosity reduced distillate at 100 degrees Fahrenheit not less than 30 per cent, and this 30 per cent not heavier than 20 Beaume, and its pour test not above zero Fahrenheit. The reduced distillate to be secured by reducing the crude with fire and steam until the bottoms have a flash of not less than 540 degrees Fahrenheit, and not more than 560 degrees Fahrenheit open cup, and the entire distillate obtained in this way reduced to a distillate of 250 viscosity. The 10 per cent cut in the original distillate having an average viscosity of 500 seconds at 100 degrees Fahrenheit to have a pour test not higher than 5 degrees Fahrenheit. GRADE B—Embraces crude which does not meet test for "A" grade.

Sun Pipe Line Company: GRADE A—Viscosity not less than 100 seconds at 100 degrees Fahrenheit Saybolt. Sulphur not over .4 per cent. Beaume gravity not over 25 at 60 degrees Fahrenheit. Cold Test: of distillates having viscosity of 1000 seconds at 100 degrees Fahrenheit shall not be over 5 degrees Fahrenheit A. S. T. M. Method. GRADE B—All Coastal crudes which do not meet specifications for Grade A crude.

38 to 38.9 gravity 1.42
39 to 39.9 gravity 1.44
40 to 40.9 gravity 1.46
41 to 41.9 gravity 1.48
42 to 42.9 gravity 1.50
43 to 43.9 gravity 1.52
44 and above 1.54

REFUGIO

(Effective April 10, 1930)

Below 25 gravity (heavy) ..... .85

REFUGIO (Light)

Same as Gulf Coast 25 gravity and above.

PETTUS

(Effective August 21, 1930)

All grades $1.15

BRENHAM

(Effective March 1, 1930)

All grades ..... .95

STATE CRUDE PRODUCTION TAXES

Oklahoma—Three per cent of gross value, less royalty interest.

Texas—Two per cent of gross value.

Louisiana—From four to 11 cents a barrel, depending upon gravity.

Arkansas—2.6 per cent of gross market value.

Montana—Two per cent of gross value at well.

Wyoming and New Mexico—Production tax based upon state and county assessments.

California—.66443 mills per barrel of oil produced and 17.39 cents per acre on proved oil lands.

WYOMING-MONTANA

(Effective April 11, 1930)

Wyoming

Byron $1.33
Ferris 1.60
Elk Basin 1.55
Grass Creek 1.55
Rock Creek 1.35
Lost Soldier 1.05
Lance Creek 1.63
Mule Creek 1.20
Notches ..... .65
Big Muddy 1.38
Osage 1.65
Hamilton Dome ..... .85
Pilot Butte 1.75
Torchlight-Greybull 1.65
Lander ..... .80
Rex Lake 1.10
South Casper Creek-Poison Spider 1.00

SALT CREEK

Midwest Refining Company

29 to 29.9 gravity .....$ .90
30 to 30.9 gravity ..... .96
31 to 31.9 gravity 1.02
32 to 32.9 gravity 1.08
33 to 33.9 gravity 1.11
34 to 34.9 gravity 1.14
35 to 35.9 gravity 1.17
36 to 36.9 gravity 1.20
37 and above 1.23

MONTANA

(Effective Feb. 15, 1930)

Sunburst $1.65
Cat Creek 1.48
Lake Basin 2.20

NEW MEXICO

(Effective April 11, 1930)

Artesia 1.05
Hog Back 1.43
Maljamar ..... .95
Jal and Lea ..... *

(*) West Texas price scale used by The Texas Company and Humble Oil & Refining Co.

CANADA

(Effective June 28, 1930)

Oil Springs 1.95
Petrolia 2.02

LOUISIANA-ARKANSAS

(Effective April 11, 1930)

Homer, Haynesville, Caddo, El Dorado, DeSoto and Crichton and Cotton Valley*

Below 28 gravity .....$ .87
28 to 28.9 gravity ..... .92
29 to 29.9 gravity ..... .97
30 to 30.9 gravity 1.02
31 to 31.9 gravity 1.07
32 to 32.9 gravity 1.12
33 to 33.9 gravity 1.17
34 to 34.9 gravity 1.22
35 to 35.9 gravity 1.255
36 to 36.9 gravity 1.29
37 to 37.9 gravity 1.325
38 to 38.9 gravity 1.36
39 to 39.9 gravity 1.395
40 to 40.9 gravity 1.43
41 to 41.9 gravity 1.465
42 to 42.9 gravity 1.50
43 to 43.9 gravity 1.535
44 gravity and above 1.57

*Shreveport-Eldorado's postings stop at above 40 gravity.

The posting on Cotton Valley is same as Caddo. From 36 to 52 and above the regular gravity schedule is followed.

The Texas Company pays North Texas gravity scale in North Louisiana.

STEPHENS

Below 28 gravity .....$ .76
28 to 28.9 gravity ..... .81
29 to 29.9 gravity ..... .86
30 to 30.9 gravity ..... .91
31 to 31.9 gravity ..... .96
32 gravity and above 1.01

SMACKOVER

Below 24 gravity .....$ .90
24 and above 1.05

United States Daily Average Production

Figures below are taken from the complete revised estimates of the AMERICAN PETROLEUM INSTITUTE except for the current week, which are advance estimates issued by the A. P. I. and are subject to revision:

1929	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Arkansas	Eastern States	Rocky Mountain	California	United States Daily Av.	United States Total
May	679,650	115,400	651,100	150,350	35,350	71,500	114,150	72,850	749,250	2,639,600	81,827,600
June	685,200	120,750	688,200	147,500	35,700	70,050	116,750	72,000	827,200	2,763,400	82,902,250
July	722,050	124,250	718,950	148,150	35,750	68,650	122,000	74,250	874,850	2,888,900	89,555,250
August	728,100	127,950	750,750	153,100	36,300	66,900	126,600	77,900	873,300	2,940,900	91,167,250
September	714,050	128,450	741,200	156,600	37,050	65,300	137,250	78,600	874,850	2,933,350	88,000,650
October	673,600	113,400	714,550	167,050	39,700	64,550	137,400	77,950	876,600	2,864,800	88,809,500
November	640,300	110,050	702,350	171,350	36,750	63,700	135,400	76,550	706,500	2,642,800	79,285,050
December	650,000	111,600	687,850	161,350	38,700	61,850	140,650	76,150	698,200	2,626,350	81,417,000
1930											
January	671,050	111,700	672,650	178,300	37,650	58,500	142,250	73,850	688,850	2,634,800	81,574,650
February	631,900	111,400	654,600	199,950	39,450	58,400	135,050	74,850	746,350	2,652,150	74,280,200
March	622,650	115,500	644,400	206,000	41,600	58,600	132,700	73,600	649,000	2,544,050	78,865,400
April	657,050	122,200	640,950	206,800	42,100	57,800	138,700	75,950	625,700	2,576,250	77,018,100
May	663,300	131,000	662,350	203,900	39,900	53,800	137,150	82,500	623,700	2,597,700	80,529,600
June	665,550	133,600	668,300	210,500	40,300	56,900	135,750	84,600	598,000	2,593,500	77,806,900
July	594,750	121,600	652,350	209,400	40,550	55,400	137,200	98,350	610,450	2,520,050	78,121,200
Aug. 2	554,650	116,450	692,700	208,200	41,650	55,050	135,100	104,800	606,700	2,515,300	17,607,100
Aug. 9	560,650	117,950	643,450	207,550	42,600	55,500	132,050	103,350	616,100	2,480,200	17,361,400
Aug. 16	538,200	114,400	654,400	207,750	41,050	50	2,550	850	.....	16,650	116,550
Aug. 23	566,900	114,650	639,200	203,850	41,500	55,050	126,850	114,750	607,700	2,470,500	17,293,500
Increase	28,750	250	.....	.....	450	.....	.....	12,250	.....	6,950	48,650
Decrease	.....	.....	15,200	3,900	...	400	2,650	...	12,600	.....	.....

TEXAS
(Outside Gulf Coast)
PANHANDLE DISTRICT

	Aug. 23	Aug. 16
Carson County	8,500	9,300
Gray County	69,400	69,300
Hutchinson County	21,250	21,000
Wheeler County	600	600
Others	300	350
Total	100,050	100,550

NORTH TEXAS

Archer County	15,200	16,600
Burkburnett	7,700	7,200
Electra	10,600	11,700
Iowa Park-KMA	5,400	5,800
Montague and Cooke Cos.	9,900	9,850
Wilbarger	22,000	22,000
Others	1,750	1,750
Total	72,550	74,900

WEST CENTRAL TEXAS

Brown County	6,000	6,000
Callahan County	3,200	3,200
Coleman County	2,900	3,000
Eastland-Desdemona	5,400	5,450
Jack County	2,500	2,550
Palo Pinto County	500	500
Shackelford County	7,000	7,000
Stephens County	5,600	5,600
Throckmorton County	800	800
Young County	17,100	17,700
Others	1,750	1,800
Total	52,750	53,600

WEST TEXAS

Crane-Upton Counties	39,450	39,200
Crockett County	2,350	2,200
Ector	8,700	11,350
Howard County	22,800	23,600
Jones County	1,350	1,400
Mitchell-Scurry Cos.	2,100	2,100
Pecos County	3,400	3,500
Reagan County	21,900	21,700
Winkler County	70,200	75,000
Yates	103,200	102,550
Others	4,700	4,600
Total	280,150	287,200

EAST CENTRAL TEXAS

Boggy Creek	2,700	2,900
Corsicana-Powell	5,500	5,650
Currie	350	300
Mexia	4,600	4,400
Nigger Creek	200	250
Richland	200	200
Van Zandt	25,350	25,400
Wortham	800	900
Total	39,700	40,000

SOUTHWEST TEXAS

Chapman	9,100	10,000
Dale	300	300
Darst Creek	42,300	44,500
Laredo District	13,800	13,800
Luling	9,000	9,900
Lytton Springs	900	900
Salt Flat	16,500	16,500
Somerset	1,500	1,600
Others	600	650
Total	94,000	98,150
T'tl Tex. (Outside Gulf Coast)	639,200	654,400

TEXAS GULF COAST

Barbers Hill	18,250	18,100
Batson	1,100	1,100
Big Creek	4,600	4,600
Blue Ridge	1,750	1,600
Boling	1,050	1,100
Damon Mound	700	700
Esperson	2,800	2,500
Fannett	800	800
Goose Creek	4,500	4,800
Hankamer	2,100	2,600
Hull	8,600	7,900
Humble	20,850	20,400
North Dayton	900	850
Orange	2,100	2,100
Orchard	2,700	1,750
Pettus	6,200	6,300
Pierce Junction	13,100	14,150
Port Neches	2,100	2,100
Raccoon Bend	12,250	12,000
Refugio	27,350	29,700
Saratoga	1,000	1,000
Somerville	1,400	1,450
Sour Lake	2,250	2,300
South Liberty	3,600	3,700
Spindle Top	16,400	16,500
Sugar Land	12,150	11,800
West Columbia	3,900	4,000
Others	2,550	2,500
Total	177,050	177,800
Texas Total	816,250	832,200

OKLAHOMA

Allen	15,150	14,600
Asher	1,250	1,300
Blackwell	2,950	2,950
Bowlegs	14,250	15,200
Braman	3,300	3,300
Bristow Slick	15,250	15,350
Burbank	15,600	15,600
Carr City	5,650	6,950
Cromwell	7,500	7,500
Cushing	13,450	13,400
Davenport	1,200	1,200
Duncan District	9,500	9,550
Earlsboro	22,750	23,800
East Earlsboro	18,100	16,250
East Little River	13,400	11,050
East Seminole	2,300	2,450
Fox	1,150	1,150
Garber	4,600	4,600
Graham	3,250	3,300
Healdton	11,900	11,950
Hewitt	7,100	7,150
Hubbard	1,450	1,450
Konowa	16,400	15,500
Little River	22,400	27,350
Logan Co.	4,900	4,800
Maud	3,850	4,200
Mission	7,000	8,000
North Okmulgee	10,400	10,450
Oklahoma City	108,150	70,650
Osage (outside Burbank)	25,350	25,600
Papoose	2,500	2,450
Pearson	700	650
St. Louis	25,650	26,400
Sasakwa	5,000	5,400
Scholem Alechem	13,500	13,500
Scaright	7,500	7,900
Seminole	15,150	15,850
S. Earlsboro	9,550	9,850
South Okmulgee	7,100	7,150
Thomas	700	700
Tonkawa	6,400	6,650
West Asher	6,550	5,750
Wewoka	3,700	3,800
Yale Jennings	7,800	7,900
Others	65,650	67,650
Total	566,950	538,200

CALIFORNIA

Dominquez	10,000	10,000
Elwood-Goleta	40,000	50,000
Huntington Beach	28,800	27,600
Inglewood	17,400	17,400
Kettleman Hills	15,000	12,500
Long Beach	103,600	104,400
Midway-Sunset	64,000	64,000
Playa Del Rey	12,000	.....
Santa Fe Springs	107,500	108,000
Seal Beach	20,400	20,400
Ventura Avenue	47,000	48,000
Others	142,000	158,000
Total	607,700	620,300

KANSAS

Augusta-Fox Bush	2,650	2,800
Churchill	3,650	3,700
Eldorado-Towanda	13,800	13,950
Florence-Covert	750	750
Greenwood County	19,100	18,900
Oxford	2,650	2,750
Peabody-Ebling	2,500	2,600
Rainbow Bend	1,100	1,050
Russell	3,300	3,250
Sedgwick	19,100	19,350
Voshell	9,050	7,800
Others	37,000	37,500
Total	114,650	114,400

NORTH LOUISIANA

Caddo Heavy	2,550	2,600
Caddo Light	9,400	9,350
Cartersville	3,550	3,850
Cotton Valley	2,000	2,000
De Soto-Red River	3,050	3,050
Haynesville	4,750	4,750
Holly	1,200	1,000
Homer	3,500	3,500
Urania	5,250	5,300
Zwolle	4,600	3,950
Others	1,650	1,700
Totals North Louisiana	41,500	41,050

LOUISIANA GULF COAST

Bayou Boullion	150	200
East Hackberry	2,450	3,750
Edgerly	400	400
Evangeline	2,100	2,100
Hackberry	1,200	1,200
Lake Barre	1,200	1,200
Lockport	2,800	3,800
Port Barre	3,600	3,650
Sorrento	100	100
Sulphur Dome	3,100	3,500
Sweetlake	1,200	1,200
Vinton	5,500	6,050
Others	3,000	2,800
Total Louisiana Gulf Coast	26,800	29,950
Louisiana Total	68,300	71,000

ARKANSAS

Champagnolle	4,350	4,750
El Dorado	4,200	4,250
Lisbon	950	950
Nevada	1,000	1,000
Smackover Heavy	37,350	37,300
Smackover Light	5,100	5,100
Stephens	950	950
Others	1,150	1,150
Total	55,050	55,450

MOUNTAIN STATES
WYOMING

Big Muddy	2,000	1,750
Elk Basin	800	750
Grass Creek	2,100	2,150
La Barge	1,850	1,950
Lance Creek	100	150
Lost Soldier	3,650	2,700
Oregon Basin	3,000	2,900
Rock River	2,100	2,150
Salt Creek	29,750	26,900
Others	4,900	4,450
Total	50,250	45,850

MONTANA

Cat Creek	1,150	1,150
Pondera	2,400	2,050
Sunburst	5,850	5,850
Others	50	50
Total	9,450	9,100

COLORADO

Florence	400	400
Fort Collins	1,300	1,300
Moffats (Craig)	1,150	1,150
Others	1,600	1,600
Total	4,450	4,450

NEW MEXICO

Artesia	700	650
Bal. Lea & Eddy Co.'s	47,900	40,450
Hogback	500	450
Rattlesnake	1,300	1,300
Table Mesa	100	100
Others	100	150
Total	50,600	43,100
Total Mountain States	114,750	102,500

EASTERN STATES
(Including Ill., Ind., Ohio, W. Va., Pa., Ky., N. Y.)

	117,000	119,500
Michigan	9,850	10,000
Total Eastern States	126,850	129,500

PRODUCTION SUMMARY

East of Rockies	1,748,050	1,740,750
Total U. S.	2,470,300	2,463,550

COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

CALIFORNIA

Company, Well and Location	Initial Production Bbls.	Depth
LONG BEACH—		
T. J. Cannon, Jones 3	400	7355
Community Monarch Pet. Co., Reagan 1	100	7110
Dabney-Johnston Oil Corp., No. 49	600	7175
F. H. Lathrop, McAdoo-Colter 1	350	7055
A. N. Macrate, Stevens 1	200	7030
MT. POSO—		
General Pet. Corp., Hisen 32	200	1650
NEWHALL—		
York-Smullin, Clampitt 3	200	1300
ROUND MOUNTAIN—		
Harry Failing, Coffee 1	400	1760
SANTA FE SPRINGS—		
Union Oil Co., Howard 16	300	5165
VENICE (Playa del Rey)—		
Barnsdall Oil Co., Burks 3	1000	6075

OKLAHOMA

Company, Well and Location	Initial Production Bbls.	Depth
CARTER COUNTY—		
C. Anderson, Eaves 2, nw c sw 24-1s-3w	50	2594
Trevelyn Oil Co., Mitchell 2, nw sw se 24-1s-3w	1775	2452
Wirt Franklin Pet. Corp., Mitchell 1, nw c se 24-1s-3w	1800	2461
Magnolia, Gill 7, ne c se 23-1s-3w	280	2550
CREEK COUNTY—		
Atlantic Prod. Co., Harjo 1, sw c ne 27-14-10e	30	3336
C. G. Tibbens O.&G., White 1 se c nw 6-14-9e	¶2	1013
Dixie Drilling Co., Helton, cnl ne ne 12-17-9e	20	1810
Phillips Pet. Co. and Gled Oil Co., Koch 8, se c ne 20-19-9e	130	2221
Amerada et al, Whitenbeck 1, ne c sw 21-16-8e	*	3835
Pioneer Pet. Co., Lewis 3, sw c nw 19-17-11e	*	2470
Carpenter et al, Collins 1a, se ne nw 4-17-11e	*	2120
Gled Oil Co., Field 1, nw c sw 31-19-8e	*	3035
HUGHES COUNTY—		
Clark and Cowden, Brown 1, sw se ne 17-7-8e	¶40	2971
Dubbs and Pryor, Allen 1 sw c nw, 16-6-10e	*	763
S. T. McGee, Buck 1, se c 21-9-10e	*	3170
JEFFERSON COUNTY—		
Bridwell and Sigler, Jones 2, se c ne nw sw 16-7s-5w	30	1097
McGinley & Sigler, Jones 2, se c nw sw 16-7s-5w	7	784
LINCOLN COUNTY—		
T. J. Hughes et al, School land 1, nw c ne 36-17-3e	¶11	3947
MARSHALL COUNTY—		
Otto Reynolds, Davis-Sullivan 3, sw c nw se nw 30-5s-6e	50	650
Bilbo Oil Corp., Taliaferro 15, sw ne se 14-5s-5e	*	741
Bilbo Oil Trust Co., Davis-Sullivan 6, cwl e½ w½ nw 30-5s-6e	*	735
MUSKOGEE COUNTY—		
Foltz and Paul, Escoes 1, se c sw nw ne, 8-15-18e	*	1700
A. H. Hanson, Crabtree 1, cel sw nw 12-15-18e	*	1037
NOBLE COUNTY—		
Magnolia Pet. Co., Summers 1, se ne nw 4-20-1w	¶17	3428
OKLAHOMA COUNTY—		
Sinclair, School land 7, ne se ne 36-11-3w	3975	6683
I.T.I.O., Emmerson 6, sw se sw 30-11-2w	1180	6590
Coline Oil Co., Clauer 12, se ne se 25-11-3w	1407	6525
I.T.I.O., Watters 4, sw nw ne 25-11-3w	2270	6473
I.T.I.O., Watters 6, nw sw ne, 25-11-3w	3362	6541

Tabulation and Comparison on page 70

Company, Well and Location	Initial Production Bbls.	Depth
Wirt Franklin, Page 1, se c 35-12-3w	¶120-7209	6390
T. B. Slick and Atkinson, Baker 2, cnl sw se nw 1-11-3w	12,192	6444
I.T.I.O., Lemmon 2, se sw se 11-11-3w	4502	6520
Plains Oil Co. and Denver P.&R. Co., Boulevard View 1, sw nw nw 14-11-3w	4527	6648
I.T.I.O. and Anderson-Pritchard, Boulevard Addn. sw nw nw 14-11-3w	1452	6650
I.T.I.O., Huffman 1, ne nw sw 14-11-3w	3015	6599
T. B. Slick, Page 1, ne c nw 14-11-3w	3741	6559
Shell Pet. Corp., Egermier 1, ne c sw 23-11-3w	3664	6629
I.T.I.O., Watters 5, se sw ne 25-11-3w	1748	6511
OKMULGEE COUNTY—		
Jess Rebold, McGilbray 3, se c ne 27-13-13e	8	1373
A. G. Hazlett, Dunbar 3, sw c 30-14-13e	10	1958
J. C. Smith et al, Rawley 1a, sw nw se 22-13-11e	*	300
OSAGE COUNTY—		
Texas Co. and Prairie, 6, nw ne nw 30-25-8e	60	2440
Vacuum Oil Company, 4, nw se ne 22-26-6e	175	3010
National Refining Company, 11, ne sw se 22-27-11e	60	1700
Oklahoma Natural Gas Company 1799, nw c sw se 30-21-11e	¶¼	2080
MID-CO Oil Company, 20, nw c ne se 18-22-10e (owdd)	5	1970
Galt-Brown, 5, ne c 15-24-83	*	2725
Texas Company and Prairie, 7, ne nw nw 30-25-8e	*	2518
PAWNEE COUNTY—		
Deraldine Oil Co., Elledge 1, se c sw 7-20-8e	5	1242
Thompson and Black, More 3, ne nw sw 14-20-9e	¶2¼	923
PAYNE COUNTY—		
Skelly Oil Co., School Land 1-"A", ne se sw 16-19-5e	15	3825
POTTAWATOMIE COUNTY—		
Pure Oil Co., Case 1, sw se sw 14-6-3e	1130	3635
Gypsy Oil Company, Archer 1, nw sw sw 23-6-3e	144	3595
I.T.I.O., Davidson 4, ne sw nw 23-6-3e	2760	3476
Westheimer and Neustadt, Johnson 1, ne se sw 27-6-3e	130	3621
Clark and Cowden, Townlot 1, ne sw nw 8-9-5e	250	4443
Shell Pet. Corp., Case 1, sw c 14-6-3e	*	3569
Shell Pet. Corp., Case 2, se sw sw 14-6-3e	*	3629
Gypsy Oil Co., Navarrie 1, se c 15-6-3e	*	3637
Independent O.&G., Jameson 1, se sw se 15-6-3e	*	3699
SEMINOLE COUNTY—		
Hilton A. Phillips, Hyde 6, sw c ne 20-6-6e	910	2929
Empire O.&R., Dameron 2, se c nw 20-6-6e	805	2925
Barnsdall Oil Company, Johnson 5, sw c se 17-6-6e	310	2926
Mid-Continent Petroleum Corp., Harjoche 2, se c sw 17-6-6e	180	2945
Gypsy Oil Company, Miller 2, se sw se 24-9-5e	560	4239

Company, Well and Location	Initial Production Bbls.	Depth
Sinclair O&G., Cully 2-"A", sw ne		
W. B. Pine, Davis 2, csl n½ nw 17-5-8e	50	2591
nw 13-5-7e	1500	4284
Amerada Petroleum Corporation, Ground 4, nw sw nw 23-9-5e	*	5308
Amerada Petroleum Corporation et al, Ground 6, ne sw nw 23-9-5e	*	4238
Amerada Petroleum Corporation and Wilcox O.&G., Gates 2, nw ne ne 25-9-5e	*	4218
STEPHENS COUNTY—		
Magnolia Petroleum Co., Green 6 (owdd ne c nw 13-1s-4w	¶20	2800
Pandem Oil Company, Burkleo 1, nw c sw nw nw 4-2s-8w	25	2193
TEXAS COUNTY—		
Argus Production Company, Ralston 1, c ne 23-6-14e, cm	¶5½	2951
TULSA COUNTY—		
Holmes, Burton et al, Brightman 2, csl ne ne 30-19-10e	125	2235
WAGONER COUNTY—		
A. H. Secrest, Barnett 1, sw c ne, 34-17-16e	¶¼	888

KANSAS

Company, Well and Location	Initial Production Bbls.	Depth
BUTLER COUNTY—		
Johnson et al, Stern 1, sw ne se, 28-27-6ee	40	3054
Tidal Oil Co., Corbin 1, se c nw, 6-27-4e	800	2721
Callahan & Lassen, Mackerle 1, se c sw, 10-26-6e	*	3280
Pioneer Petroleum Co., Crist 1, nw c se, 33-26-4e	*	2996
CHASE COUNTY—		
Polhamus et al, Leedy 4, c nw, 36-22-9e	20	2510
COFFEY COUNTY—Linn Oil & Ga., Barngover 3, sw ne nw, 7-23-15e	35	1587
Ritchey et al, Assenmacher 1, c se, 36-22-13e	*	2250
Hoyt et al, Scott 2, nw c se, 13-23-14e	*	1631
GREENWOOD COUNTY—		
Tulsa Oil Co., Thrall 1, nw ne nw, 7-24-12e	50	1786
Aladdin Petroleum Co., Jones 4, se c nw, 36-24-10e	*	1901
MORTON COUNTY—		
McNabb et al, Ricketts 1, c se, 5-35-39w	¶6	2805
Argus Production Co., Thompson 1, c nw, 18-34-39w	¶5½	2810
Dreibelbis 1, c ne, 9-34-39w	¶6	2903
Mangel 2, c nw, 4-34-39w	¶13½	2851
Mangel 1, (owdd), c se, 4-33-29w	¶1½	2773
RICE COUNTY—		
Robertson et al, Snyder 1, ne nw se, 27-20-10w	*	3405
Braden, McClure et al, Groves 1, nw ne sw, 27-20-10w		3364
ROOKS COUNTY—		
Krueger et al, Stites 1, nw se sw, 12-9-16w	*	575
RUSH COUNTY—		
Danciger O&R et al, Neve 1, nw c, 26-17-17w	*	3606
RUSSELL COUNTY—		
Empire Gas & Fuel and Prairie, Ochs 2, se c ne, 23-15-14w	245	3371
SEDGWICK COUNTY—		
Vickers Pet. Co., Keyes 2, nw c ne, 30-27-2e	270	2978
STEVENS COUNTY—Trees Oil Co., Brecheisen 1, c nw, 3-35-38w	¶10	2825
Argus Production Co., Stone 1, c ne, 3-33-39w	¶8	2705
Wagner 1, c s½ se, 17-33-38w	¶5	2757

EASTERN STATES

PENNSYLVANIA

Company, Well and Location—	Initial Prod. Bbls.	Depth
BARDFORD FIELD—		
South Penn Oil Co. Fee, 113	3	....
South Penn Oil Co. Fee, 114	17	....
South Penn Oil Co. Blair, 2	7	....
South Penn Oil Co. Brooks, 15	2	....
South Penn Oil Co. Brooks, 16	2	....
South Penn Oil Co. Jones, 282	2	....
South Penn Oil Co. Bingham 454 tr 23	3	....
South Penn Oil Co. Dent, 131	2	....
South Penn Oil Co. Taylor, 53	2	....
South Penn Oil Co. Moody, 41	3	....
South Penn Oil Co. Moody, 42	3	....
Moody & Moody Dent, 7	5	....
R. O. Landers & Co Landers, 28	3	....
L. F. Kinley & Co Montz, 63	2	....
Forest Dev. Co. Forest (4 wells	8	....
Forest Petroleum Corp. (7 wells)	14	....
T. T. Fox Franchot, 1	4	....
T. H. Givin, Givan, 5	4	....
Minard Run Oil Co. Fee, 15	12	....
Bradford Producing Co. Bennett, 1.	5	....
Niagara Oil Corp. Niagara (27 wells)	54	....
BUTLER COUNTY—		
Ravenwood Oil Co. McGinley, 3	2	....
Heeter & Co. Halstead, 1	*	....
Freeman & Beals, Cashdollar, 3	*	....
Finnessy & Co Snyder, 16	2	....
McGowan & Co. Stevens, 4	*	....
Frederick & Wallet Co. Goepfort, 1	*	....
CENTER-MIDDLE FIELD—		
South Penn Oil Co. Wardwell, 1	2	....
H. E. Camp Estate, Bingham, 1	3	....
Keenan & Co. Lot 37 tr 1	¶¼	....
Keenan & Co. Lot 37 tr 2	2	....
S. H. Elder & Co. Fee, 31	3	....
CLARION-VENANGO COUNTIES—		
Nuhfer Oil Co. Nuhfer, 1	¶1	....
Nuhfer Oil Co. Nuhfer, 2	¶1	....
Nuhfer Oil Co. Nuhfer, 3	¶¾	....
Alum Rock Gas Co. Garis, 6	¶1	....
Wood & Hess, Deitrick, 5	2	....
McClellan & Co. Hanst, 1	*	....
C. B. Kern, Chamberlain, 19	2	....
S. Y. Ramage, Simcox, 71	2	....
Lamey & Moyer, Caffrey, 40	2	....
Webb & Yonkers Kapp, 4	3	....
Weller Rickey & Co 1	*	....

NEW YORK

ALLEGHANY COUNTY—		
L. A. Wilson & Co. Wilson, 1	2	....
J. Meridian & Co. Meridian, 1	4	....
McCaffrey & Co. McCaffrey, 1	3	....
F. H. Stephan Trustee, Stephan 2.	2	....
F. W. Stephan & Co. Kurtzholtz, 7	3	....
J. M. McDivitt & Co. McDivitt, 20	2	....

KENTUCKY

DAVIESS COUNTY—		
Jetsan Oil Co. Hinton, 5	25	1145
Hupp, French & Co. Ware, 5	10	....
Shell Petroleum Co. Weatherford, 4	10	....
Pet Oil Co. Howard, 2	8	1150
Osborne & Co. McDaniel, 1	20	....
Evans & Garrison, Davis Hrs 14	20	....
Hupp, Duff & Co. Atherton, 2	15	....
Hupp, Duff & Co. Hayden No. 2 tr. 7	50	....
Penn-Indiana Oil Co. First Nat. Bank & Trust, 2	12	....
Leeper Oil Co. Veach, 6	¶½	....
OHIO COUNTY—		
James C. Ellis & Co. Howard, 1	¶½	....
James C. Ellis, Taylor, 1	*	....
James C. Ellis, Taylor, 2	10	....
J. E. Hare & Co. Kirk, 2	25	700
Louisville Gas & Electric Co. Miller, 10	10	....
Harry Ogles, Howard, 1	¶1	....
S. H. Russell, Hordin, 6	¶¼	476
Wood Oil Co. Griffith, 2	30	502
Chester Oil Co. Medcalf, 12	15	406
S. R. Berry & Co. Coleman, 4	*	450
Hupp, Duff & Co. Brown, 3	*	685
First Owensboro Bank & Trust, Brown, 12	12	700
McLEAN COUNTY—		
Miller & Damron, Dunn, 2	35	....
McLean Development Co. Jones, 1	*	....
H. C. Smith Co. Whitehouse, 1	*	....
Trout, Cameron & Co. Baugh, 1	15	1226
HENDERSON COUNTY—		
Niagara Oil & Gas Co. Gish 1	¶¼	....
P. E. Tichenour, Knight, 6	15	....
Lang Oil & Gas Co. Willingham, 1.	8	....
WARREN COUNTY—		
H. Julian & Co. Reeves No. 2 tr 2	80	465
Shriver & Co. Sennabaugh, 2	*	1150
WEBSTER COUNTY—		
Craig & Lowery, Walker, 1	¶¼	....

SOUTHEASTERN OHIO

NOBLE COUNTY—		
H. E. Schmidt, Laning, 3	¶¼	749
C. D. Harper & Co. Luke, 1	3	667
D. R. Greenloe & Co. Coal Lands, 8	5	1776
MONROE COUNTY—		
Marion M. Fisher & Co. Fisher, 8	*	1430
J. C. Christy & Co. Martin, 1	2	1440
WASHINGTON COUNTY—		
Haldman & Lewis, Moore, 1	¶¼	2007

CENTRAL OHIO

GUERNSEY COUNTY—		
Ohio Fuel Gas Co. Hollingsworth, 1	*	1145
Ohio Producing & Refg. Co. Little, 1	120	3690
ATHENS COUNTY—		
Ohio Fuel Gas Co. Woode, 1	¶1¾	1131
Ohio Fuel Gas Co. Lowther, 1	*	1666
Ohio Fuel Gas Co. Sargent, 2	¶1	1543
ASHLAND COUNTY—		
Ohio Fuel Gas Co. Swineford, 1	¶3½	....
Ohio Fuel Gas Co. Kline, 1	¶¼	....
Ohio Fuel Gas Co. Ford, 1	*	....
LICKING COUNTY—		
The Preston Oil Co. Martin, 1	45	3033
Ohio Fuel Gas Co. Goldsmith 1	¶¼-3	2946
Emerald Petroleum Co. Weakley, 1.	¶¼	843
Everette Gas Co. Flenner, 3	60	2902
Hope Construction & Refg. Co. Hickey, 3	12	3064
MEDINA COUNTY—		
Ohio Fuel Gas Co. Henry, 1	*	....
Ohio Fuel Gas Co. Spicer, 1	¶¼	....
Ohio Fuel Gas Co. Richardson, 1	*	....
Oko Oil & Gas Co. Essig, 38	40	284
Oko Oil & Gas Co. McVicker, 31	10	440
MUSKINGUM COUNTY—		
Donehoe & Co. Rusk, 1	5	1095
The Pure Oil Co. McKee, 1	53	3092
TUSCARAWAS COUNTY—		
Ohio Fuel Gas Co. McFadden, 1	¶½	3609
Wehrle Co. Snyder-Baxter, 1	*	1169
Wehrle Co. Euga, 1	*	4500
PERRY COUNTY—		
Kachelmacher Estate, Hemlock Coal 6 ¼ M G	86	3653
Allegheny Oil Co. Longstreth, 6	2	1125
COSHOCTON COUNTY—		
Dugan, Sloan & Co. Adams, 13	10	1070
BELMONT COUNTY—		
Fulton, Peters & Co. Slevin, 3	¶¼	1966
Harmon & George Good, 3	¶¼	2899
LORAIN COUNTY—		
Ohio Fuel Gas Co. Clark, 1	*	....
HOCKING COUNTY—		
Ohio Fuel Gas Co. Shaw, 1	*	2491
ATHENS COUNTY—		
Carpenter & Glazier, Curtis, 9	*	218

NORTHWESTERN OHIO

SENECA COUNTY—		
Kansas-Ohio Oil & Gas Co. Harrison, 2	40	1330
SANDUSKY COUNTY—		
Lewis Hille, Linde, 5	7	1235
MERCER COUNTY—		
Margaret E. Grace & Co. Clay, 1	10	1184
HARDIN COUNTY—		
Blanchard Oil & Gas Co. Kirt, 1	¶½	1380
CRAWFORD COUNTY—		
Newcomer & Co. Koonsman, 1	*	1877

INDIANA

STEUBEN COUNTY—		
The Cousins Oil & Gas Co. Hissong, 1	2	2400
WARRICK COUNTY—		
Indiana Southern Gas Utilities Co. McWilliams, 1	*	....
RANDOLPH COUNTY—		
Henderson Bros. Sell, 1	*	....
FLOYD COUNTY—		
The Wood Oil Co. Farnsley, 1	*	....
HUNTINGTON COUNTY—		
Two Rivers Oil Co. Buzzard, 1	¶1	....
HAMILTON COUNTY—		
Holeman & Co. Sturdevant, 1	*	....
PIKE COUNTY—		
C. C. Taliaferro Jr. George, 4	¶1	1127
Bemen Gas Co. A. George, 3	¶1¼	....

ILLINOIS

LAWRENCE COUNTY—		
The Ohio Oil Co. Ridgley, 12	*	....
Silurian Oil Co. Combs, 20	5	1680
WABASH COUNTY—		
Ridge Farm Oil Co. Gillett, 4	*	1550

MISSOURI

ST. LOUIS COUNTY—		
St. Elco Oil & Dev. Co. Reller, 1	*	1759
ST. CHARLES COUNTY—		
Wheeler & Co. Bradshaw, 1	*	848

MICHIGAN

MUSKEGON COUNTY—		
Muskegon Oil Corp. Daniloff, 9	40	1894
ISABELLA COUNTY—		
Dixie Oil Co. Davis, 5	50	3590
Gibson-Johnson-Borden Co. Cole, 2.	¶6½	1410
Isabella Development Co. Keeler-Mitchell, 2	¶2½	1343

WEST VIRGINIA

ROANE COUNTY—		
United Fuel Gas Co. Savage, 1	¶¼	....
United Fuel Gas Co. Littlepage, 3963	¶2	2005
Union Gas Corp. Epling, 1	¶¼	....
Richard Elkins Estate, Smith, 33	¶¼	2174
Southeastern Gas Co. Boggs, 1	¶2	1642
CALHOUN COUNTY—		
W. H. Bickel, Hayhurst, 2	¶2	1936
Southeastern Gas Co. Shanks, 4	¶¼	2046
Virginia Gasoline & Oil Co. Morris, 2	5	....
WIRT COUNTY—		
Virginian Gasoline & Oil Co. Woodyard, 1	10	....
JACKSON COUNTY—		
Capital City Oil & Gas Co. Gray, 2.	4	....
CLAY COUNTY—		
Thompson Gas Co. Schoonover T22.	¶1	2121
KANAWHA COUNTY—		
United Fuel Gas Co. Wells, 4261	*	....
DODDRIDGE COUNTY—		
Pittsburg & West Virginia Gas Co. Ryner, 4983	¶¼	2502

ARKANSAS

UNION COUNTY (Champagnolle)—		
Lion O. R. Co., Rowland 1, 15-17-14	*	3006
Magnolia Pet. Co., W. K. Gregory 1, 15-17-14	65	2864
UNION COUNTY (Smackover)—		
D. N. Stewart et al, Murphy 1, 9-16-15	*	2104

LOUISIANA

NORTH LOUISIANA

BOSSIER PARISH—		
Magnolia Pet. Co., Matlock 3, 25-23-12	20	3197
CADDO PARISH—		
Shreveport Oil Corp. Hicks 3, 32-21-15	75	2119
Calatex O&G Co., Taylor-Trosper 2, 8-16-16	*	2976
OUACHITA PARISH—		
Pipes & Mack, Union Gas Prod Co. 1, 7-18-5e	*	2500
RICHLAND PARISH		
Hope Prod. Co., Brown 1, 22-16-6e	¶43¼	2440
Northern La. Nat. Gas Co., L. R. Hemler 2, 23-16-6e	¶37	2450
Southern Carbon Co., D. R. Sartor C-1, 29-16-6e	¶40¾	2450
SABINE PARISH (Pleasant Hill)—		
J. M. Bridges, Cook 1, 34-10-12	¶16	3191

SOUTH LOUISIANA

ANSE LA BUTTE—		
Yount-Lee Oil Co., Hebert 2	*	6225
PORT BARRE—		
Pure, J. A. Perkins 1, salt	*	3825
STARKS—		
Gulf, Lutcher & Moore 24	420	1100
SULPHUR—		
Union Sulphur Co., Fee 756	80	5340
VINTON—		
Vinton Pet. Co., Matilda Gray 8	600	3420

TEXAS GULF COAST

Company, Well and Location	Initial Production Bbls.	Depth
BARBERS HILL—		
Sun O I Co., Chambers Co. 6	1000	4125
Wilburn Fee 8	700	5275
O. K. Winfree 1	1080	5328
Sinclair, McKinney Fee 5	250	5245
BIG CREEK—		
Gulf, T. W. Davis 59	100	3675
ESPERSON—		
Cranfill-Reynolds, Esperson 15	200	3295
Esperson 14	200	3312
Moores Bluff 3	125	2335
HULL—		
The Texas Co., Barrow Fee 2	575	3865
HUMBLE—		
The Texas Co., Wheeler & Pickens 23	*	5640
Fee 1	130	4010
LOLITA—		
The Texas Co., Mitchell 1, G. Ewing League, Jackson Co.	*	6260
PETTUS—		
S. R. C. Corp., Townsite 1, Block 31	15	3875
Houston Oil Co., Townsite 1, Blk. 33	420	3943
Union Prod. Co., Ray 12, W. D. Sutherland sur, Goliad County, 6 mi ne oil prod.	*	5514
Ray 10, lcn 3000 ft nw No. 3	*	4040
Grayburg Oil Co., Copeland 1, Wm. Sanford sur.	*	3834
Glasscock Bros., Townsite 1, Blk. 24	10	3880
Getty Oil Co., Townsite 1, Blk. 40	10	3873
Cosden Oil Co., McKinney 3, Jno. Pace sur,	35	3655
REFUGIO—		
Union Producing Co., O'Brien 5	25	5445
Houston Oil Co., Ryals 3	125	3657

CENTRAL WEST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
BROWN COUNTY—		
Giesendorf et al, Wise 2	*	585
Herring et al, Layman 2	*	1356
CALLAHAN COUNTY—		
Humble O&R Co., Kennard 2-B	*	1650
COLEMAN COUNTY—		
Gibson-Payne & Clark, Rogers 1	*	2063
PALO PINTO COUNTY—		
Root & Rhodes et al, Costello 2	8	1417
SHACKELFORD COUNTY—		
Magnolia Pet. Co., Gorsuch 1	*	1900
Skelly Oil Co., Mathews 7-S	20	1125
STEPHENS COUNTY—		
O. F. Stripling et al, Harris 1-A	*	2190
Texas Pacific Coal & Oil Co., Winston 2	¶¼	4800

TEXAS PANHANDLE

Company, Well and Location	Initial Production Bbls.	Depth
CARSON COUNTY—		
Denson et al, Cobb 1	50	3026
Suloch O I Co., J. Q. Bost 1	¶25	3240
Texas Interstate P. L. Co., S. B. Burnett (Sec. 77) 1	¶37	2765
GRAY COUNTY—		
Delmar Oil Co., A. Smith 1	330	3239
Dixon Creek Oil Co., W. W. Hannah 4	400	3220
Empire Gas & Fuel Co., J. G. Noel 2	260	3202
R. J. Sailor 1	480	3237
A. C. Shields 2	270	3220
Jewell Oil Co., W. W. Harrah 1	50	3325
Magnolia Pet. Co., J. E. Cubine 1	*	2775
MOORE COUNTY—		
Texas Interstate P. L. Co., J. Zofness 1	¶25	2634
HUTCHINSON COUNTY—		
Phillips Pet. Co., Johnson-Cart 1	¶32	3202
Johnson-Trammel 1	¶6	3250

NORTH TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
ARCHER COUNTY—		
Bridwell Oil Co., Green 2	35	1132
F. P. Cullum et al, Falls 4-A	60	1151
Golding-Cochran et al, Brown 10	*	1176
R. L. Hayes et al, Bearden 1	20	1085
F. P. Hynes et al, Richardson 1	65	1178
Pois & Schultz, Green 3	75	1141
Shappell Oil Co., K&K 1-F	*	1836
Underwood Drlg. Co. et al, Andrews 6	*	980
COOKE COUNTY—		
Deep Rock Oil Corp. et al, Lawson 1	180	1331
FOARD COUNTY—		
The California Co., Nichols 1	*	3726
WICHITA COUNTY—		
Arkansas Fuel Oil Co., K&K 38-A	40	1666
R. R. Clark et al, Bickley 8	80	867
Douglas Prod. Co., Thatcher-Fee 1	20	869
John O'Neil et al, Waggoner 1	*	1753
Honuaker 2	10	1019
M. Staniforth et al, K&K 1	*	1828
J. H. Turner et al, Smythe 1	*	2005
Walton & Blair, Honaker 3	30	865
WILBARGER COUNTY—		
Staley-Wynne & Co., Waggoner 4-R	50	2481
YOUNG COUNTY—		
Arkansas Fuel Oil Co., Jeffery 1	*	905
J. A. Bearman et al, Baldwin 1	*	752
Consolidated Oil Co., Deitrich 1-A	90	1096
Corzelius & Vandeveir, Hutchins 1	*	1050
McDonald & Campbell, Holder 1	*	825
W. R. Stafford et al, Brown 1-B	*	615
J. H. Watson et al, A. C. Watson 2	*	803

SOUTH TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
BEXAR COUNTY—		
Edminston et al, Hamberdale 1	717	18
Swearingen Oil Co., Fee 6	690	10
CALDWELL COUNTY—		
Al Buchanan, Brown 2	*	2058
DARST CREEK—		
Magnolia Pet Co., L. V. Echols 4	50	2276
NUECES COUNTY—		
Saxet O&G Co., Dunn 6	125	4290
R. A. Thomson, Trustee, Lawrence-Harrall 2	¶75	1659
STARR COUNTY—		
I. V. McLean 1	*	238
VAL VERDE COUNTY—		
East Del Rio 1	*	3360
WEBB COUNTY—		
Magnolia Pet. Co., Benavides 4-A	70	2335
WILLIAMSON COUNTY—		
W. D. Anderson, M. V. Anderson 6	500	2247
E. L. Chapman, J. C. Abbott 6-B	200	
T. P. Simmons 6	4500	1878
J. L. Collins & Co., M. V. Lawrence 2	100	1852
E. E. Ertel et al, J. C. Abbott 6	400	2145
E. R. Marts, T. P. Simmons 4	2000	1962
G. Stratton, J. C. Abbott 5	125	2210
Ed Mead, J. C. Abbott 1	400	2140
R. C. McIntyre, Barney Lawrence 1	420	2200
ZAVALLA COUNTY—		
Texas Gas & Fuel Co., Pryor 1	¶20	1124
ZAPATA COUNTY—		
Allied Gas Co., Trevino 7-B	80	1278
Trevino 9-A	50	1238
O. W. Killam, Cuellar 25-B	280	1579
W. R. Shankle, Trevino 3	100	1248
Trevino 5	100	1238
S. R. C. Corporation, Cuellar 11-B	100	1217
Trevino 6-A	75	1279
Trevino 5-A	50	1266

WEST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
FISHER COUNTY—		
Midwest Explo. Co., Decker 1	250	3259
The Texas Co., Teagarden 1-A	*	3240
GLASSCOCK COUNTY—		
Humble O&R Co., Arrington 1	800	2300
Magnolia Pet. Co., Roberts-Magnolia 2	8	1930
IRION COUNTY—		
Straughn & Texannati Oil Co., Nutt 3	60	1447
PECOS COUNTY—		
Cardinal Oil Co., Tippett-Tidal 3	30	420
Continental-McMan O&G Co., Tippett 1	*	495
The California Co., Smith 11, Lse. 1, Sec. 23	6700	1737
UPTON COUNTY—		
Gulf Prod. Co., Shirk 1-B	210	2685

CENTRAL EAST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
VAN ZANDT COUNTY—		
Humble O&R Co., R. S. Blake 1	4500	2947
Pure Oil Co., J. R. Shivers 1	10,000	2870
W. F. Swain (48-ac) 1	¶2.20	2930
J. T. Thompson 8	5000	2927
J. J. Murphree 3	5000	2937

NEW MEXICO

Company, Well and Location	Initial Production Bbls.	Depth
LEA COUNTY—		
Gypsy Oil Co., Grimes 2	20,000	4155
Grimes 3	29,000	4150
Humble O&R Co., D. A. Bowers 3	12,300	4175
D. A. Bowers 4	9300	4175
Midwest Ref. Co., State 3, Sec. 4	¶5-2125	4175
State 8, Sec. 4	¶15-19,850	4175
State 26, Sec. 4	¶5-1555	4190
State 8, Sec. 10	725	4200
Shell Pet. Corp., State 2-A	¶20-7650	4185

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Ralph E. Grim, assistant state geologist of Mississippi, and professor of geology at the University of Mississippi at Oxford, has gone to Yale University to complete work for his doctor's degree in geology. H. M. Morse, graduate of Oklahoma University, succeeds him.

WILDCATS FROM ALL SECTIONS

SOUTH TEXAS

ATASCOSA COUNTY — American Central O&G Co.'s McConnell 2 W.M.C. Baker sur, td 400 ft, still sd. Frontier Oil Co.'s Boynton 2, John Sharp sur, td abt 900 ft, dr.

BASTROP COUNTY—Champion Bros.' H. B. Smith 1, (1 mi w of Elgin) dk completed. Pacific O&G Co.'s J. M. Lytton 1, ru.

BEXAR COUNTY—Bolling and Michael's J. P. Adam 1, M. Gotzaire sur, td abt 800 ft, sd. Eckert and Son's Sandemer 7, Menchaca sur, td not reported, dr. Edminston et al's Hamberdale 1, (Dobrowolski pool) td 717 ft, 683 top of pay, prod abt 15 bbls; Hamber 2, lcn. KMS Pet. Co.'s E. Salicky 1, Mission Garden sur, lcn. Moore and Juar's Ellison 1, (14 mi w of San Antonio) td 2110 ft, csg set top of sand to test, fsh at last report. Morgan et al's Masterson 3 (N end of lease in Dobrowlski pool) td 300 ft, no later report. Penn Oil Co.'s Cooksey 1, J. W. Ball sur, mv on tools. Penn-Tex Oil Co.'s Sandemer 3, Menchaca sur, td 680 ft, dr in. Russel & Moore's Mills 1, Angel Navarro sur, td 735 ft, lost hole; Mills 2, (50 ft e of No. 1) skidded dk over, sp in; Price-Storey 1, A. Navarro sur, td 200 ft, sd. Swearingen Oil Co.'s Fee 6, (600 ft s and w of No. 1) td 690 ft, prod 10 bbls; Fee 7, (300 ft w of No. 6) lcn; Halverdier 2, J. Perez sur, td abt 700 ft, being completed. Henry Yelvington's (formerly Swift & Fischer) Beck 1, P. W. Hays sur, td 1400 ft, sd at present.

BLANCO COUNTY—Anderson & Manning's 1, John W. Speer sur, ru. Adams & Lysles' Leeders 1, James Standford sur, td 440 ft, set 8-inch csg at 400 ft, re-dr. D. J. Meeks' E. W. Walker 1, Noel Nixon sur, td abt 430 ft, set 8¼-inch csg. C. L. McCreary's Miers 1, Scherling subdivision, td not reported, dr. Rosenfeld et al's Hohenberger 1, (survey 94) sp in. H. Sitton's McMillen 1 (2 mi w of Blanco) mv on heavy rig.

BROOKS COUNTY — Houston Oil Co.'s Wormser-Holbein 2, Palo Blanco de Manguelloa grant, td 3498 ft, dr, dst at 3149 ft, made small gasser, dr to 3235-40 ft, gas showing 3251-54 ft, tested gas; tested gas at 3356-58 ft. Humble's Singer 2, (Sec. 312, 1 mi s of Lasater field) td 4775 ft, set 6⅝-inch csg at 4769 ft, sand at 4769-75 ft, shows gas. Southern Crude Oil Purchasing Co.'s Holbein-Wormser 1, (4 mi s of production in Lasater field) td 1000 ft, dr.

CALDWELL COUNTY — Al Buchanan's Brown 2, C. M. Cannon sur, td 2058 ft, dry and abn.

DUVAL COUNTY — Callahan, Howard & Smith's Luby 1, (survey 24) td 4024 ft, sd.* Humble's Koehler 48, td 1770 ft, set csg at 1754 ft, top oil sand at 1765 ft. Mag. Pet. Co.'s Lundell 1, td 5858 ft, sd; Hahl Norton 1, td 2357 ft, set csg. W. E. Mulholland's Benavides 2, td 2550 ft, dr. SAL O&G Co.'s Welder-Woods 2, (survey 215) td 2500 ft, standing. South Texas Prod. Co.'s Dinn 4, (survey 398) td 1712 ft, set csg at 1700 ft, top of sand 1704 ft, waiting on cement. Vacuum Oil Co.'s Duval Ranch Co 1, (survey 280) dr water well, last report. Sloan et al's Luby 1, (survey 593) lcn.

EDWARDS COUNTY — James Dalgish et al's Sid Peterson 3, (Warner Ranch) td abt 1800 ft, dr. Phillips Pet. Co.'s Holman 2, (sur No. 25) td 4120 ft, csg set, waiting on cement.

FRIO COUNTY—J. J. Little's 1, (near Frio Town) mv on. W. H. Wrays' Barns 1, td 100 ft, sd.

GOLIAD COUNTY—A. G. Rheimenschneider, Trustee, A. T. Fromme 1, Peter Dexter sur, td 1800 ft, dr. Union Prod. Co.'s Ray 12, (W. E. Sutherland sur), td 5515 ft, sd; Ray 27, Jabian Gamesz sur, lcn; Ray 28, 2 mi e Union No. 3 Ray, lcn; Ray 29, 2 mi e Ray 3 of Union, lcn.

GONZALES COUNTY—Lake & Thompson's Campbell 1, (Saturn area) ru rotary. Linden Pet. Co.'s Hensley 1, James Smith sur, td below 2500 ft, dr. John Mauld'n's (Finnell and Elam) Robinson 2, td 3284 ft, Halliburton test is being made of oil sand.

GUADALUPE COUNTY—Cranfill-Reynolds' J. McIntyre 1, A. Gibson sur, td 2170 ft, dr.

ABBREVIATIONS

NOTE—The following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn—abandoned; bbls—barrels; b.s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in.—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—side-tracking; sp—spudding; sr — straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; Wosr—wait.ng on standard rig.

Empire O&G Co.'s Dowdy 5, td 1900 ft, dr. Grayburg Oil Co.'s Wells 2, James D. Baume sur, td 1515 ft, dr. Guy Lewis et al's Malone 1, Carvajal sur, dk. New Braunfels O&G Co.'s Seidmann 1, Esneuricas Eleven league sur, td 1200 ft, dr, show of gas. Mag. Pet. Co.'s L. V. Echols 4, (400 ft w of No. 3) td 2276 ft, prod 50 bbls, set csg on top crevice in Taylor marl at 2231 ft. Ray Oil Co.'s R. Flesing 1, M. Baker sur, td 940 ft, dr. Suttle et al's Baenzinger 2, A. Manzola sur, to sp in.

JIM HOGG COUNTY—Cole Pet. Co.'s Cole 1, sur 23, lcn; Wood 1, (sur 82) lcn. North and Walton's Allen 1, (blk 13) lcn. Wm. H. Barnhart's McCampbell Ranch 1, (blk 33) ru. E. E. Watts, Agt.'s, 1, Gomez sur, td 200 ft, dr, gas and oil sand at 125-31 ft.

KARNES COUNTY—Morrissey & Edminston's T. H. Ragsdale 1, (John McCall sur, td 1365 ft.

KENDALL COUNTY—Borget et al's Wallie Haag 1, td 1050 ft, dr. R. M. Perkins' J. Lawhon 1, (J. Lawhon sec 10) td 580 ft, sd. Dixon et al's Behr 1, (3 mi se Sisterdale) td below 2100 ft, dr, complete fsh job at 2090 ft. Molwinkle et al's Karston 1, sur 724, td abt 1250 ft, dr. Permina Oil Co.'s Boles 1, (5 mi ne Boerne) ru. P. B. Sterling's McCrocklin 1, C. B. Owen sur, td 850 ft, sd on top of pay lime. Hardy Sitton's W. B. Garvin 1, td 760 ft, sd for 6⅝-inch cas.

KERR COUNTY—Mashe & Trunstill's Jeff Love 1 (Western Kerr County) td 700 ft, set csg.

KINNEY COUNTY—Blume et al's Herbst 2, (Boindexter Burns sur) td 300 ft sd. Mag. Pet. Co.'s Wardlow 1, (Blaez sur) td 2985 ft, dr. Mardon Oil Co.'s Clamp 2, td 2714 ft, dr.

LIVE OAK COUNTY—Catlett & O'Neill's Pat Pugh 1, Garner sur, lcn. Houston Oil Co.'s Booth 1, td 2400 ft, plugged back after shooting off bit, side tracking bit; Cartwright 22, td 5000 ft, dr in shale. Larcuo Gas & Pet. Co.'s Wallace D. Wade 1, (5 mi n and e of Sandaria) lcn. Markley et al's Reeves-Brown 1, J. E. King sur, dk.

MAVERICK COUNTY — Rycade Oil Co.'s Chitti 5, (sec 129) td 4675 ft, dr; Sullivan 5, (sec 82) td 6874 ft, dr; Chitti 6, (sec 416) td 3475 ft, waiting on cement.

McMULLEN COUNTY—N. Coquat's Wm. Fahler 1, Geo. Pickett sur, td 2004 ft, temp abnd, contract depth. Mogul Pet. Co.'s Martin 1, E. Meloy sur, lcn. Penn Oil Co.'s Lyne 1, H&GN sur, lcn.

MEDINA COUNTY — Armstrong et al's Donaldson 1, td 170 ft, sd. Calco Pet. Co.'s Crawford 1, td 2000 ft, fsh for ds, top of Austin at 1978 ft, abt 250 ft high. Fitzgerald et al's 1, (6 mi se of Devine) ru. Lynke Pet. Co.'s Irrigated Farms 2, lcn. Natl Oil Co.'s Howard 1, John George sur, td 1645 ft, set 6⅝-inch csg at 1610 ft on top of sand, cored saturated sand 35 ft, to dr in shortly. Pan-American Dev. Co.'s Hardt 1, td below 1900 ft, dr.

NUECES COUNTY — Grimm & Yakey's Land Ranch 1, (7½ mi ne of Agua Dulce field) lcn. Goucher Dr. Co.'s 1, (1½ mi n of Robstown), lcn. Houston Oil Co.'s M. E. Brooks 1, (Agua Dulce field), td 5478 ft, mv off; Rand Morgan 1, 350 ft e of Laurence gasser) ru. Independent O&G Co.'s C. Baldwin 1, 2½ mi w of Corpus Christi, td 3690 ft, coring. Saxet O&G Co.'s (Pearson et al) Donigan 2, 6 mi w of Corpus Christi, lcn; Dunn 6 (500 ft s of No. 5 in Saxet field) td 4304 ft, set csg abt 4290 ft, sand topped at 4290 ft, prod 125 bbls of 24 gravity oil, opens new field. R. A. Thomson, Trustee's, Lawerence-Harrell 2, 8 mi w of Corpus Christi, td 1659 ft, prod 75,000,000 cubic ft of dry gas with 700 lbs. pressure.

SAN PATRICIO COUNTY — Cosden Oil Co. et al's John Schmalsteig 1, C. H. Paul sur, td 4414 ft, coring sand. Jacob, Bussini & Pickett's J. C. & Bobby Baldwin 1, td 4020 ft, sd mv on heavy rig, to re-dr. J. L. Kenedy's Lolie McRay 1, ru. Peterman Oil Co.'s O. K. Crow 1, (2 mi s of Sinton) td 1500 ft, dr, set 800 ft surface csg; Foster 1, (3¼ mi w of Sinton) lcn. Saxet Oil Co.'s Carroll 1, Taft subdivision, prep to sp in. Union Prod. Co.'s Welder 4, E. Portillo sur, td 2800 ft, dr.

STARR COUNTY—Nuguna Oil Co.'s Kelsey-Boss 1, (Porcion 75), ru. Mrs. J. L. Smith's Walch 1, td 915 ft, shows gas and sulphur water, installed roller bit, td temporarily. I. V. McLean's No. 1 (Porcian 81), td 238 ft, abn. Kush & Duerksen's Kelsey-Boss 1, td 425 ft, dr. Los Olmos Oil Co.'s Kelsey-Boss 1, (blk 6), ru. Texas Co.'s Guerra "A," (Porcion 67), ru.

UVALDE COUNTY—Phantom Oil Co.'s Claudt 1 (survey 661), td 2482 ft, dr.

VAL VERDE COUNTY—Atlantic Oil Prod. Co.'s Reynolds & Miller 1, (blk 32, H&TC), dr 750 ft. A. Blume's Yoast 1, (I&GN sur), sd at 800 ft. Independent Operator's Whitehead 1, (blk 4, I&GN sur), sd at 5376 ft for casing. O. O. Owens et al's Mills 1, (blk 1, I&GN sur), td 6742 ft, reaming. Phantom Oil Co.'s Ingram 1, (sec 33), td 4320 ft, fsh. Valvert Oil Corp.'s Bassett 1, (sec 47), sd at 4000 ft. East Del Rio's 1, td 3360 ft, abn, cas pulled and dk removed.

VICTORIA COUNTY—Attee Dr. Co.'s J. C. West 1, td 1525 ft, still sd. Houston Oil Co.'s McFadden 1, (C. L. Mann sur), td 850 ft, dr. Lion O&R Co.'s McFadden 2, (Trevino sur), td 4032 ft, re-dr, 8¼-in cas set at 4012 ft, gas sand at 3740-3975 ft, dr plug. The Texas Co.'s McFadden 1, 6 mi s of Bloomington, td 3190 ft, dr.

WEBB COUNTY—J. L. Elliott's Esperanza Land & Livestock Co. 2, (sec 815), td 1980 ft, sd. Gattlin & Matthews' Garza 1, (sur 413, Muckelroy field), ru. O. W. Killam's Bruni 19, lcn; Bruni 12, (Albercas Grant), td 3100 ft, dr; Bruni 1, td 1800 ft, dr; Bruni 5, td 3009 ft, showed 15,000,000 cu ft gas and 50 bbls oil and salt water at 3000-08 ft, plugging back to complete as gasser, whipstock out at 2555 ft, bottom of hole 2600 ft, completing as big gasser. New sand in Cole field. Mag. Pet. Co.'s Wright 1, (survey 674), dk; Benavides 4-A, td 2340 ft, set cas at 2335 ft, pumping 70 bbls; Jones 1, (sur 674), td 2985 ft, coring. Geo. S. Marshall's Garcia 2, td 1888 ft, testing sand topped at 1860 ft. South Texas Prod. Co.'s Benavides 3, td 1767 ft, cas set at 1764 ft, sand topped 1764 ft, waiting on cement. Trussell, Cezeaux & Partee's Bruni 1, td 2110 ft, dr. Washington-Texas O&G Co.'s R. O. Benavides 1, (blk 16, sec 268), ru; Barnsley 1, td 2090 ft, dr.

WILLIAMSON COUNTY—W. D. Anderson's M. V. Anderson 6, td 2247 ft, prod 500 bbls; M. V. Lawrence 7, td 2242 ft, cas set; M. V. Lawrence 8, lcn; Simmons 5-A, set cas 1465 ft; T. P. Simmons 6, lcn; S. J. Smith 1, td 2575 ft, sd for water. Big Indian Royalty Pool's Rosenberg 1, td 1200 ft, sd. E. L. Chapman's J. C. Abbot 6-B, td not reported, prod 200 bbls; J. C. Abbot 1, (discovery well), cleaning out, running tubing; T. P. Simmons td 1878 ft, prod 4500 bbls, topped serpentine at 1541 ft; F. Fuchs 1, td 850 ft, fsh. J. L. Collins & Co.'s M. V. Lawrence 2, (S. Miller sur), td 1852 ft, prod 100 bbls; M. V. Lawrence 5, (S. Miller sur), td 1462 ft, dr in Serpentine; M. V. Lawrence 7, (S. Miller sur), lcn. E. E. Ertel et al's J. C. Abbott 6, td 2145 ft, prod 400 bbls; H. Swenson 1, td 700 ft, dr in black shale. Elliott & Chapman's A.

J. Carlson 1, td 40 ft, sd. A. J. Luke's Simmons 1, (H. Owen sur), td 2210 ft, dr in Serpentine. W. C. Marshall's R. A. Krueger 2, td 2950 ft, sd. E. R. Marts' T. P. Simmons 4, (S. Miller sur), td 1962 ft, prod 2000 bbls. Martin et al's S. H. Jarrell 1, td 40 ft, sd. G. Stratton's J. C. Abbott 4, (S. Miller sur), td 2210 ft, prod 125 bbls; J. C. Abbott 5, (S. Miller sur), td not reported, dr. A. M. Keisker's E. L. Chapman 1, dk. Jess Tomberlin's Partian Bros. 1, td 1410 ft, sd. R. S. Wilson et al's C. Sitman 1, (T. A. Moore sur), td 2850 ft, dr in sandy shale. Ed Mead's J. C. Abbott 1, td 2140 ft, prod 400 bbls. R. C. McIntyre's Barney Lawrence 1, td 2200 ft, prod 420 bbls.

ZAVALLA COUNTY—Anglin O&G Co.'s Pryor 5, td 1103 ft, no report on operations. Cromwell et al's Whitecotton 1, dk. Gribbs & Davidson's Weatherby 1, (near Loma Vista), td 1782 ft, re-dr. Texas Gas & Fuel Co.'s Pryor 1, td about 1130 ft, prod about 20,000,000 cu ft gas, cas set 1124 ft; Pryor 2, to make lcn. Weigand Bros.' Gates 1, td 2350 ft, new dr stem bits and crude oil, re-dr.

ZAPATA COUNTY—Alamo Dr. & Leasing Co.'s Trevino 4, (Claggett lease) ru; Trevino 6, (Claggett lease), lcn; Trevino 6, (Blair lease), lcn. Allied Gas Co.'s Trevino 9-A, td 1238 ft, set cas, waiting on cement; Trevino 7-B, td 1293 ft, cas set at 1278 ft, pro 80 bbls; Trevino 16-A, lcn; Trevino 9-A, td 1250 ft, set cas 1238 ft, prod about 50 bbls; Trevino 3-B, td 1000 ft, dr; Trevino 6-B, td 1252 ft, cas set, wait on cement. Allied Gas & Allen & Morris' Guittierrez 4, lcn. E. Guittierrez 5, td 1230 ft, dr; E. Guittierrez 6, lcn; E. Guittierrez 7, lcn; E. Guittierrez 8, lcn; E. Guittierrez 9, lcn. Arnold & Ahler's (Wicker et al), Garza 3, ru. Blair & Son's Guittierrez 1, (share 2 Comitas Grant), (sw of Muckelroy field), td 600 ft, dr. Edgington & Niles' Trevino 2-A, td 1100 ft, dr; Trevino 5-B, lcn. Nordan-Morris et al's C. Bustamente 2, (150 ft ne of center of line), lcn; Trevino 1, td 1287 ft, sand 1254-70 ft, coring deeper, small show oil; E. Bustamente 1, (Comita Grant No. 7), lcn; S. Bustamente 1, (Comitas Grant No. 34), lcn. Henne & Winch's Bustamente 2, td 100 ft, dr. Keene & Jackson's Garza 1, sp in. O. W. Killam's Cuellar 25-B, td 1579 ft, set cas 1566 ft, flowing 280 bbls of oil; Lopez 3, (sur 75), td 1634 ft, dr; Cuellar 27-C, td 400 ft, dr; Cuellar 26-B, ru. Lincoln O&G Co.'s Wormser 1, (12 mi sw Muckelroy), ru. Nat'l Oil Co.'s Adams 1-A, (150 ft n of No. 1 in Borego Grant), skidding over dk to start dr shortly. B. F. Nixon's Guittierrez 1, (Partition No. 10, Borrego Grant), td 100 ft, dr. John Papas, Inc.'s Flores 1, (Porcion 350), dk. Penn Tex Oil Co.'s F. Benavides 3, ru, laying water line. Penny Prod. Co.'s Trevino 1, (sec 4), td 780 ft, setting rotary tools; Cuellar 1, (Pappas sur), td 350 ft, dr. W. R. Shankle's Trevino 3, td 1260 ft, set cas 1248 ft, prod 100 bbls oil; Trevino 5, td 1245 ft, set cas at 1238 ft, prod 100 bbls oil. Skoglund & Maddox's Montemayor 1, ru. SRC Corporation's Cuellar 9-B, td 1273 ft, dr; Cuellar 11-B, td 1232 ft, cas set 1217 ft, flowing 100 bbls; Cuellar 13-B, td 1216 ft, cas set, waiting on cement; Trevino 6-A, td 1279 ft, cas set 1253 ft, prod 75 bbls; Trevino 5-A, td 1282 ft, set cas 1266 ft, prod 50 bbls; Cuellar 14-B, td 1200 ft, dr; Trevino 7-A, td 1276 ft, waiting on cement; Trevino 8-A, td 700 ft, dr. T. W. Word's Uribe 1, (share 7, Borrego Grant), ru.

WEST TEXAS

Company, Well and Location		Initial Production Bbls.	Depth
ANDREWS COUNTY—			
Deep Rock Oil Co. et al, A. R. King 1		25	4454
Humble-Atlantic & Penn, H. M. Wilson 1		"	4775
CRANE COUNTY—			
Sun Oil Co., State Bank 1		"	3309
CROCKETT COUNTY—			
Magnolia Pet. Co., A. C. Hoover 1		*	6140

ANDREWS COUNTY—Deep Rock Oil Co. et al's W. J. Mathis 1, elev 3193 ft, top salt 1730 ft, testing prod after two shots, td 5088 ft. Fuhrman Pet. Corp.'s W. T. Ford 1, elev 3186 ft, sd pending deal, gauged 26 mil ft gas 4062-68 ft. Martin-Maer & Kell's Meadors 1, elev 3288 ft, top salt 1705 ft, dr 3115 ft.

BREWSTER COUNTY—Trans-Pecos O&G Co.'s Jones 1, elev 3073 ft, sd 2510 ft.

COKE COUNTY—Arkansas Fuel Oil Co.-Dixie Oil Co.'s Stepp 1, dr 4080 ft.

CONCHO COUNTY—W. C. Beasley et al's Sam Waring 1, sp and sd. A. W. Turner et al's Brosig 1, sd hfw 1550 ft.

CRANE COUNTY—Cranfill Bros. Oil Co.'s J. T. Muir, dk. Cranfill Bros. & Gulf Prod. Co.'s Tubbs 1, elev 2526 ft, top salt 505 ft, top white lime 2445 ft, fsh 3993 ft. C. C. Duffey et al's Cowden 1-C, top salt 560 ft, dr 2245 ft. Magnolia Pet. Co.'s A. C. Hoover 2, dr 660 ft. McMan O&G Co.-Amerada's Powell 2, rig.

CULBERSON COUNTY—Grisham-Hunter Corp.'s W. D. Garren 2, elev 4325 ft, top Delaware 1273 ft, sd 1520 ft. W. L. Kornrumpf et al's Garren 1, sd 850 ft.

ECTOR COUNTY — Southern Crude Oil Pur. Co.'s Cowden 1, elev 3053 ft, show gas 3940-45 ft, cemt 8⅝-in cas 3957 ft. H. F. Wurtz et al's Ibbetson 1, 2840 ft top salt 865 ft, sd 2375 ft.

EDWARDS COUNTY—Phillips Pet. Co.'s Holman 2, dr 4990 ft.

FISHER COUNTY—Cranfill-Reynolds Co.'s Flannigan 2, elev 1794 ft, testing oil production at 3092-3112 ft, after pb from water at 3124-30 ft; B. F. Willingham 3, rig.

GARZA COUNTY—H C. Cate & Mel Richards' Stoker 1, elev 2591 ft, top salt 935 ft, top lime 2365 ft, cemt cas 3017 ft to test show gas 3045-55 ft.

GLASSCOCK COUNTY — Ed. Timberlake et al's Meek 1, elev 2575 ft, top lime 2670 ft, sd 2965 ft. World Oil Co.'s McDowell 3-C, elev 2537 ft, sd 680 ft.

TOM GREEN COUNTY—Belding & Dutton's Norsworthy 1, co 440 ft. Mintex Oil Co.'s Campbell 1, sd 780 ft. Phillips Pet Co. et al's Jennings-Gulden 1, fsh 3275 ft.

HOWARD COUNTY—Greene Prod. Co. & Getty Pet. Corp.'s Denman 1, dr 350 ft. Meriwether Oil Co.'s Smith 1, elev 2590 ft, top lime 3010 ft, sd hfw 3270 ft.

HUDSPETH COUNTY—Geo. R. Thieson et al's University 1, sp and sd.

IRION COUNTY—Burton et al's Nutt 1, lcn. J. E. Bristow et al's Nutt 1, dr 460 ft. Carl Cromwell et al's Tankersley 1, elev 2520 ft, dr 1415 ft. Straughn & Texannati Oil Co.'s Nutt 4, lcn; Tankersley 1, lcn. F. E. Webb et al's W. H. Williams 1, sp and sd. P. H. Williams et al's Ashe 1, sd 8900 ft; Noelke 1, set cas 850 ft.

JONES COUNTY—Gibson-Johnson et al's Hudspeth 1, ur 2806 ft. C. R. Pope et al's Swann 1, sp and sd.

LOVING COUNTY—The California Co.'s Reagan 2, top salt 735 ft, dr 3900 ft; Reagan 3, top salt 726 ft, dr 3375 ft; Reagan 4, elev 2738 ft, top salt 790 ft, dr 2445 ft. Dixie & Phillips' Johnson 1, dry and abn after shot 180 qts 4365-4435 ft, td 4712 ft. A. R. Eppenauer et al's Allen 1, sp and sd. Geo. A. Henshaw et al's Reagan-McElvain 1, elev 2689 ft, top salt 745 ft, dr 1815 ft; Russell 2, salt 755-4038 ft, top black lime 4227 ft, co to shoot, td 4360 ft. L. E. Lockhart et al's Wheat-Ramsey 1, dr 4065 ft. Miller-Burge & Healy's Chapman 1, top salt 750 ft, dr 2510 ft. Joe Rush et al's Jim Wheat 1, top salt 785 ft, dr 3030 ft. Lee O. White et al's Russell 1, top salt 750 ft, dr 2420 ft.

MENARD COUNTY—W. C. Barnett et al's Callan 2, elev 2077 ft, sd sfw 1270 ft; Callan 4, machine. L. G. Priest et al's J. P. Sorrells 1, elev 2279 ft, recovered junk, dr 2450 ft.

PECOS COUNTY—Barnes et al's Sanford 1, dr 1010 ft. E. L. Chapman et al's Streety 1, elev 2653 ft, sd 2200 ft. Curry & Eakin's Pecos Valley 1, sd 790 ft. C. L. Dittman et al's H. J. Eaton 1, machine; Eaton 2, lcn; Eaton (Sec. 37) 1, lcn; J. S. Jackson 1, lcn. Humble O&R Co.'s Kokernot 1, elev 3595 ft, top salt 2713 ft, dr 3025 ft; Mrs. C. L. Thompson 1-B, dr 405 ft. Independent O&G Co. et al's McDonald 4, elev 2489 ft, dr 1945 ft. Magnolia Pet. Co.'s Byrne 1, dr 660 ft. Messenger et al's Butz 1, sd 740 ft; Byrne 2, sd

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1367 ft. J. R. Miller et al's Bennett 1, sd hfw 1700 ft. J. D. O'Mara et al's Bennett 1, sd 1230 ft. Oregon Oil Corp. et al's Yates 2, elev 2565 ft, top salt 710 ft, sd hfw 2440 ft. O. J. Perren et al's Eaton 2, fsh 1560 ft; Jackson-Pure 1, elev 2438 ft, co after shot 60 qts at 1540-1610 ft. Pure Oil Co.'s Harrison 1, dr in sulphur water 1320 ft. Rio Grande Oil Co.'s Webb 1, fsh 95 ft. Sides & Cloyd's Blackstone-Slaughter 1, dr 2225 ft. N. E. Tanner et al's University 1, (dd), pb from 2154 ft to shoot.

PRESIDIO COUNTY—Brite Prod. Co.'s L. C. Brite 4, elev 4536 ft, sd 2630 ft.

REAGAN COUNTY — Big Lake Oil Co.'s University 3-C, flowed 150 bbls oil and 2,978,000 ft gas 8923 ft; University 4-C, flowed 70 bbls oil and bldg rotary rig to drill by junk at 8220 ft; University 5-C, dr 2915 ft; University 189, cemt cave at 2860 ft, td 4003 ft. Group One Oil Corp's (Conoco) University 4-B, rig.

REEVES COUNTY—The California Co.'s Kloh 1, elev 2798 ft, fsh 3616 ft. May & Milton's J. B. Ellis 1, sd 1300 ft. Salsbury & Gregory's Bell 1, sd 370 ft. Lee O. White et al's Mrs. Lizzie Hersheusen 1, elev 3244 ft, top salt 2670 ft, sd 4415 ft.

RUNNELS COUNTY — Boyce & Lamar's Lange 1, elev 1844 ft, sd 2643 ft; Chas. Dutton et al's G. W. Dean 1, sd 1330 ft.

SCHLEICHER COUNTY — Delmar Oil Co.'s O'Harrow 1, dr 4475 ft. Phillips Pet. Co. et al's J. A. Whitten 1, elev 2333 ft, td 6880 ft, pb to shoot again at 4915-25 ft. Munger-Wilson Oil Co.'s Page 1, elev 2270 ft, fsh 4912 ft. Paul Teas & Walter Gant's Allison 1, dr 3520 ft. J. D. Wesner et al's R. E. Ratliff 1, sd 750 ft.

SCURRY COUNTY — J. G. Armand & Camp Springs O&R Co.'s Strayhorn 1, sd 700 ft; Quinn 1-A, elev 2316 ft, sd 4374 ft. D. H. Byrd & H. A. Harmon's Murphy 1, elev 2298 ft, top salt 775 ft, top lime 1507 ft, testing for production, td 3501 ft. R. B. Pender O&G Co.'s Davis 1, elev 2208 ft, top salt 445 ft, co 4925 ft. Mid-Kansas O&G Co. (was Trancontinental) & Vacuum Oil Co.'s Peckham 1, elev 2155 ft, dr 3475 ft.

STERLING COUNTY—W. C. Beesley et al's W. L. Foster 1, sp and sd.

TAYLOR COUNTY—W. G. Clark & Humble O&R Co.'s Kendall 1, fsh 2080 ft. Eastland Oil Co. et al's Hunter 1, dr 2335 ft. Gibson-Johnson et al's Bingham 1, sd 2445 ft. H. B. Herring-Hucony Gas Co. et al's Richie 1, dr 1430 ft. J. B. Jameson et al's Webb 1, elev 1905 ft, dr 6110 ft. Sanger et al's Abilene Fee 1, rig. Sanger O&R Co.'s Osborn 1, rig.

TERRELL COUNTY—Big Bend Oil Corp. et al's Bassett 1, sd 2130 ft. Mid-Kansas O&R Co. (was Transcontinental's) Good 1, elev 2405 ft, fsh 5226 ft.

VAL VERDE COUNTY—O. O. Owens et al's H. Y. J. Mills 1, elev 2130 ft, sd 6760 ft. Phantom Oil Co.'s Ingram 1, dr by tools 3035 ft.

UPTON COUNTY—Gulf Prod. Co.'s King Ranch Oil & Lignite Co. 1, materials. Penn Oil Co. & Shell Pet. Corp.'s T. M. Anderson 1, lcn.

WARD COUNTY—Atlantic Oil Prod. Co.'s Miller-Reynolds 1, dr 975 ft. Atlantic & The California Co.'s E. W. Thomas 1, dr 1755 ft. Atlantic & Penn Oil Co.'s Bennett 1-B, show oil and water 2357-69 ft, dr 2545 ft. Bradford et al's M. B. Murry 1, sd 1720 ft. Gulf Prod. Co.'s Hutchings 4, flowed 50 bbls oil, co 2565-2740 ft; Hutchings 5, elev 2679 ft, top salt 1205 ft, top brown lime 2316 ft, cemt 6⅝-in cas 2435 ft; O'Brien 13, dr 525 ft; O'Brien 14, dr 835 ft. Magnolia Pet. Co.'s Sealy 1, dr 810 ft. R. F. Owen et al's Johnson 1, sd 1205 ft. Sid Richardson et al's O'Brien 4-A, dr 1140 ft. Shipley Oil Corp.'s Monroe 1-A, dr 2450 ft. Texas Pacific Coal & Oil Co.'s M. Barker 1, machine.

WINKLER COUNTY—Atlantic Oil Prod. Co. & Joe Maxwell's L. Daugherty 1, elev 2891 ft, top salt 1450 ft, top lime 2631 ft, flowed 1500 bbls clean oil and 4 mil ft gas via tapered tubing at 3027-45 ft. Atlantic & Simms Oil Co.'s Geo. Sealy 1, top salt 1690 ft, sd 2892 ft. Champion-Winkler Oil Corp's (Wilson) Campbell 1, sd 4440 ft. Jeffrey et al's Brown 2, sd 3120 ft. Magnolia Pet. Co.'s Scarborough 3, rig.

CENTRAL EAST TEXAS

BOWIE COUNTY—Joe Burnham et al's G. W. Burnett 1, M. H. Janes sur, rig. Lee Timberlake et al's J. Tidwell 1, Jas. Eskell sur, elev 286 ft, top Pecan chalk 1229 ft, dr 2575 ft.

CAMP COUNTY—McDonald Bros.-Atlantic Oil Prod. Co. et al's B. D. Tillery 1, J. H. Murphy sur, rig.

CASS COUNTY—Phillips Pet. Co.'s J. R. Olds 1, materials.

CHEROKEE COUNTY—H. J. Cox et al's Farris (Geo. Davis) 1, P. Bean sur, materials.

DELTA COUNTY—C. A. Everts et al's J. A. Smith 1, J. W. Renfro sur, elev 525 ft, Pecan chalk 355 to 399 ft, sd 1450 ft. Delta County Dev. Co.'s M. E. Hays 1, J. B. Anderson sur, elev 503 ft, Pecan chalk 421 to 481 ft, reaming 3000 ft. Hazel-Curtis Oil Co.'s T. J. Irwin 1, B. Williams sur, coring 3025 ft.

ELLIS COUNTY—C. G. Foster & S. C. Richardson's Moise-Cerf 1, LaPena sur, elev 140 ft, sd 2187 ft. E. M. Rogers et al's J. L. Winn 1, Orland Wheeler sur, sd 160 ft. The Triangle Corp.'s W. B. Hale 1, B. Smith sur, Austin chalk 78 to 437 ft, Woodbine sand 836 to 1120 ft, dr 2655 ft.

FANNIN COUNTY—North American Pet. Co.'s Allen 1, W. A. Broadfoot sur, sd 1400 ft. Ed. V. Parsons et al's Morgan 1, J. E. English sur, elev 668 ft, dr 3155 ft. E. M. Rogers et al's Mrs. E. C. McSwain 1, J. Tolgade sur, fsh 1350 ft.

FRANKLIN COUNTY—Harper-Byers Oil Co.'s A. J. Laws 1, D. G. Rogers sur, sp and sd.

HENDERSON COUNTY—H. B. Ashburn et al's T. E. Terry 1, Arron York sur, elev 397 ft, sd 2510 ft. L. G. Bradstreet & Co.'s J. J. Shaughnessy 1, John Isard sur, elev 548 ft, top Midway 104- ft, sd 1968 ft. E. L. Chapman et al's Cade 1, Simon Weiss sur, elev 340 ft, fsh 3200 ft. Cranfill-Germany, Inc.'s, C. C. Starr 1, G. Acosta sur, elev 434 ft, Pecan chalk 2544-2770 ft, Austin chalk 3755-4070 ft, dr 4305 ft. Geo. L. Pace et al's S. Anthony 1, J. M. Betram sur, elev 410 ft, Pecan chalk 2252 to 2361 ft, sd 2730 ft. Sunray Oil Co.'s R. H. Davis 1, E. G. Harris sur, Pecan chalk 2536 to 2694 ft, top Austin Chalk 3540 ft, dr chalk 3640 ft.

HUNT COUNTY—Fred B. Branson-C. A. Kelsey et al's J. S. West 1, Jas. Rhodes sur, elev 505 ft, Pecan chalk 1310-1365 ft, Austin chalk 1415-1815 ft, sd 2776 ft.

KAUFMAN COUNTY—Otto R. Winter & Coastline Explorations, Inc.'s, John Barrow 1, R. A. Terrell sur, top chalk 1080 ft, dr 1998 ft.

LIMESTONE COUNTY — Haley-Heeman's Wilkes 1, J. Breeding sur, elev 421 ft, sd 1411 ft.

MORRIS COUNTY — Tucker-Fullwood-Cook's P. M. Staggers 1, G. Forbes sur, top Pecan chalk 2525 ft, dr chalk 2590 ft.

NAVARRO COUNTY—O. W. Killam-Phillips et al's L. N. Wilson 1, elev 391 ft, Austin chalk 1157-1497 ft, top Woodbine sand 1991 ft, dr broken lime 2746 ft. Navarro Oil Co.'s W. N. Mathews 2, A. J. & P. M. Smith sur, Austin chalk 755-1075 ft, sd 1550 ft. Young et al's J. H. Farmer 1, Robt. Finley sur, top Austin chalk 787 ft, sd 960 ft. L. G. Priest et al's Albritton 1, (6 mi north Powell), lcn.

RAINS COUNTY — Everett & Morrison's F. Franklin 1, J. Christian sur, sp and sd.

RED RIVER COUNTY—E. L. Chapman et al's Morris-Guest 1, S. Lakin sur, sd 1505 ft.

RUSK COUNTY—Benedum-Trees Oil Co. & Clem S. Clark's Mrs. Maud R. McCafflin 1, E. Blackburn sur, dr 1415 ft. C. M. Joiner et al's Mrs. Daisy Bradford 3, Juan Ximinez sur, elev 390 ft, Pecan chalk 2590-2744 ft, base Austin chalk 3480 ft, lowering cas to test show oil 3536-92 ft. Moss et al's Mathews 1, top Pecan chalk 2296 ft, sd 2330 ft.

SMITH COUNTY—Owen-Sloan Oil Co. & R. H. Davis' J. H. Starnes 1, J. W. Allen sur, elev 417 ft, dr 2310 ft. T. B. Slick Estate & Winona Oil Co.'s Morgan Freeman 1, A. J. LaGrone sur, elev 503 ft, sd 2667 ft. Sun Oil Co.'s Oscar McGehee 1, Thomas Quevedo sur, rotary rig.

TITUS COUNTY—Deep Rock Oil Co. et al's F. M. Autrey 1, John Ping sur, elev 550 ft, top Pecan chalk 2253 ft, sd 2830 ft.

VAN ZANDT COUNTY—Bethel Oil Co.'s P. Smith 1, M. Neal sur, elev 435 ft, Pecan chalk 2555-2790 ft, Austin chalk 3865-4009 ft, fsh 4577 ft. E. L. Chapman et al's Chas. T. Wolverton 1, Wm. James sur, elev 555 ft, top Pecan chalk 2835 ft, dr 3335 ft; Wolverton 2, sd 510 ft. Dr. G. R. Cooper-E. Howard & C. W. Dooley's E. Elliott 1, W. H. Bundy sur, rig. Chas. F. Kolp et al's C. H. Mathews 1, W. H. Bruce sur, top Midway 680 ft, Pecan chalk 2085 to 2190 ft, dr 2500 ft. L. G. Priest et al's Blanche Blewett 1, E. Porter sur, elev 610 ft, Pecan chalk 2795 to 2957 ft, co 3003 ft. Texas Chief Oil & Royalty Co.'s J. P. Foster 1, F. Montgomery sur, elev 548 ft, dr 1525 ft. Vanco Oil Co.'s Wages 1, dk. Van Zandt Oil & Dev. Co.'s Sharp-Robinson 1, J. B. Ybarbo sur, elev 373 ft, top Pecan chalk 2764 ft, Austin chalk 4116 to 4508 ft, dr 4760 ft. D. H. Byrd et al's C. H. Morris 1, P. Piles sur, lcn.

VAN FIELD — Geo. S. Anderson et al's Sanger (8-ac strip) 1, elev 550 ft, top Pecan chalk 1565 ft, top Austin chalk 2471 ft, dr 2573 ft. Broderick & Calvert's M. F. Shirley (2.07 ac strip) 1, dk. E. L. Chapman et al's Clark 1, dk blown down. Hartt Pet. Co.'s O. L. & L. L. Swain (2.3-ac strip) 1, dk blown down. Hill & Hill's Maxfield (¾-ac strip) 1, rig. Humble O&R Co.'s R. S. Blake 1, elev 497 ft, Austin chalk 2264-2327 ft, top Woodbine 2371 ft, comp. flowing 60 bbls per hour, pinched at 2885-2947 ft; Blake 2, elev 467 ft, Pecan chalk 1598 to 1675 ft, cem 7-inch cas on top sand 2745 ft; Blake 3, rig; L. A. Dowdle 1, cem cas 304 ft. Imperator Oil Corp.'s Carter (strip) 2, dk. Imperator & Paul Vitek's G. J. Luther (3.01-ac strip) 1, elev 447 ft, top Pecan chalk 1653 ft, top Austin chalk 2630 ft, sd 2665 ft. Roy Jenkins et al's M. E. Davis 1, sd 410 ft. Kraft & Kelsey's Wylie Enas 1, J. Prado sur, rig. Pure Oil Co.'s M. R. Bolin 3, cem cas 2647 ft; A. D. Clark (24-ac) 4, cem cas 2745 ft; Clark 5, dr 1615 ft; A. D. Clark (4-ac) 1, dk; A. D. Clark (17-ac) 1, cem cas 309 ft; B. E. Crim 1, cem cas 302 ft; J. F. Crim (40-ac) 1, coring dry hole 2946 ft; V. T. Davis 1, dk; R. A. Howell (25-ac) 1, dr 1450 ft; A. R. Humphreys 1, cem cas 303 ft; Methodist Church lot 1, lcn; I. D. Miller 1, dr 1675 ft; M. L. McMahon 1, Pecan chalk 1675 to 1762 ft, cem 7-inch cas 2842 ft, td 2852 ft; W. E. Morris (70-ac) 1, dr chalk 2680 ft; J. T. Petty 1, cem cas 301 ft; M. F. Shirley 1, lcn; O. L. Swain (40-ac) 1, dr 1650 ft; W. F. Swain (22-ac) 1, cem cas 303 ft; W. F. ESwain (40-ac) 2, dk; H. P. Tunnell 1, dr 525 ft; Van School (5-ac) 2, dr 1765 ft; R. L. Wells 5, dk; Wells 10, cem cas 304 ft; Ella York 1, elev 487 ft, Pecan chalk 1520 to 1580 ft; Austin chalk 2264-2389 ft, coring 2532 ft; W. A. York 1, rig. Sun Oil Co.'s I. W. Thompson 3, dk. The Texas Co.'s G. W. Carter 2, rig; R. V. White (34.7-ac) 2, dr 1280 ft. Van Joint Account's W. E. Morris (3-ac) 2, dr 780 ft.

WOOD COUNTY—Wood County Development Co.'s Ricks 1, Daniel Fuller sur, sd 600 ft.

EAST TEXAS

BOWIE COUNTY—Joe Burnham et al's G. W. Burnett 1, M. H. James sur, lcn.

CASS COUNTY—Phillips Pet. Co.'s Olds 1, Stephenson sur, rig up.

HARRISON COUNTY—Shell Rock Pet. Co.'s Daugherty 1, W. D. Burris sur, sd 3520 ft.

MARION COUNTY—W. D. Chew's Fee 1, Wm Hamilton sur, set 6-in cas 2550 ft. Hussey et al's Trammell 1, Chas. Lockhart sur, dr 1500 ft.

PANOLA COUNTY—Knott et al's Marion Durham 1, Chas. Haley sur, TA 2005 ft. Smith et al's Hunt 1, Albert Johnson sur, dk. Bell et al's Barnett Lbr. Co. 1, S. B. Hendricks sur, sp set 10-in cas 110 ft tested dry thru ds 1051 ft dr 1800 ft. Ark. La. P. L. Co.'s Brumble A-2, B. C. Jordan sur, fsh ds 4408 ft.

SABINE COUNTY—Loring Oil Co.'s Nona Mills Lbr. Co. 1, Jas. Mason sur, dr 1400 ft.

SHELBY COUNTY—Chapparral Oil Co.'s Holt 2, Matthew Moore sur, sd 3300 ft.

TEXAS GULF COAST

BRAZORIA COUNTY—Thos. Faust et al's Fee 6, 2 mi s Nash dome, dr 4905 ft shale. Rycade's Wisdom 27, Nash, dr 4350 ft lime. Rycade & Vacuum's Wisdom 1, Lake Jackson, lcn. Rycade & Amerada's Seaburn 1, Stratton Ridge, dr 2075 ft sand and lime. Freeport Sulphur Co.'s Fee 2001, Bryan Mound, dr 2669 ft sand. Ruck's & Patterson's Hunter 1,

sw Hoskins Mound, sd 1175 ft. The Texas Co.'s O. F. Ewing 1, Manvel, dr 6675 ft shale. Mills Bennett's Reese 1, Allen dome, dr 3375 ft sand and lime; Poole 1, Allen dome, dr 1981 ft lime; Allen 2, Allen dome, dr 1231 ft sand. United Oil Synd.'s Mores 1, 3 mi n Danbury, dr 1435 ft shale.

CALHOUN COUNTY — The Texas Co.'s Thomas 1, Chocolate Creek, dr 4721 ft.

CHAMBERS COUNTY—Pure's Mayes A-11, Lost Lake, abn lcn; Lost Lake 5, dr 4125 ft sticky shale. Pure-Rycade's Jackson 1, Oyster Bayou, dr 4371 ft sand and shale. The Texas Co.'s Jackson 1, Salt Cedars, dr 4390 ft sticky shale. Chicago Oil Corp.'s Lawrence 1, 10 mi s Barbers Hill, sd 3950 ft.

GRIMES COUNTY — Deering & Noble's Templeman 1, 6 mi s Navasota, dr 2815 ft shale; Muenke 1, ½ mi n Anderson, ru.

HARDIN COUNTY—D. O. Speight's Gidrey 1, 4 mi s Batson, sd 2755 ft.

HARRIS COUNTY—Humble's Simms-Smith 78, Goose Creek, dr 4375 ft hard sand; Warren 8, Hockley, dr 1850 ft lime; Minnetex 3, Mykawa, dr 3950 ft shale and lime. Mrs. J. C. Baldwin's Kitzman 1, 2 mi n Cypress, sd 4250 ft. Gulf States Oil Co.'s Augspurger 1, 8 mi n Houston, sd 550 ft. Rich et al's Highland Farms 1, Elena, sd 100 ft.

JACKSON COUNTY — The Texas Co.'s Mitchell 1, Lolita, abn at 6265 ft. Jackson Co. Oil Synd.'s Drushell 8, Edna, gas sand at 3580 ft, well showed gas and then salt water on dr stem test; Lee 2, dr 3150 ft.

JEFFERSON COUNTY — Westbury Oil Co.'s West 1, S. Choate sur, dr 4160 ft gbo.

LIBERTY COUNTY — Harrison Oil Co.'s Gulf Fee 1, N. Dayton, dr 3159 ft. Saxet Oil Co.'s Davis 1, N. Dayton, dr 3865 ft salt; Wilhite 3, N. Dayton, dr 2675 ft hard sand. Victor Oil Co.'s Gulf Fee 2, N. Dayton, dr 4715 ft shale. Gulf's Ezzell 1, Hankamer, dr 3830 ft sand, oil show. Cranfill-Reynolds' Moores Bluff 3, completed for 125 bbls at 2335 ft; Vajdak 1, making some oil and gas at 7386 ft; Esperson 14, flowing 200 bbls at 3310 ft; Esperson 15, flowing 200 bbls daily at 3300 ft; No. 16, ru; Davis 5, dr 410 ft; Moores Bluff 4, dr 408 ft. Yount-Lee's Moores Bluff 3, Esperson, dr 7501 ft. Gulf's McFadden 2, Moss Bluff, dr 3825 ft. Humble's Breeden 1, Moss Bluff, driving pilng; Hylton 1, Moss Bluff, ru; Sergent 1, Moss Bluff, digging cellar.

MATAGORDA COUNTY—Empire's Boker 1, Citrus Grove, dr 3185 ft shale, lime. Cockburn Oil Corp.'s Hawkins 2, Shepherds Mott, lcn.

MONTGOMERY COUNTY — Price & Wilhite's Juergus 2, 3 mi Conroe, sd 1900 ft.

ORANGE COUNTY—Gulf's W. H. Stark 1, Port Neches, dr 5565 ft shale. The Texas Co.'s Stark 2, Port Neches, will pull screen to reset at 4595 ft.

WALKER COUNTY—Joyce Richardson et al's Smither 1, 12 mi n Huntsville, sd 3450 ft. Texas State Oil Co.'s Fails 1, nw Huntsville, dr 2925 ft gbo.

WASHINGTON COUNTY — W. B. Birdwell's Schram 1, 3 mi e Brenham, sd 2100 ft. Clifton et al's Pruiss 1, 3 mi sw Brenham, sd 1600 ft.

WHARTON COUNTY—C. S. Thomas' Taylor 1, Boling, dr 1325 ft shale; Volny 1, Boling, sd 250 ft.

SOUTH LOUISIANA

Company, Well and Location	Initial Production Bbls.	Depth
ST. LANDRY PARISH—		
Hebert-Baker Oil Co., E. D. Fisher 1, 1 mi n Richard	*	4375

ACADIA PARISH—Yount-Lee's Houssiere-Latrielle 9, Evangeline, dr 6475 ft shale; Crowley 7, Evangeline, dr 1200 ft gbo.

ASSUMPTION PARISH—Poor Boys Drlg. Co.'s La Barre Est. 1, Napoleonville, dr 2300 ft gbo.

AVOYELLES PARISH — R. A. Tippett's Chatalin 1, 5-1n-3e, sd 3400 ft.

CALCASIEU PARISH — Adams Oil Co.'s Roderick 1, Starks, r 1100 ft. J. O. Davis' Ind. Lbr. Co. 1, Starks, dr 3910 ft shale. J. G. Sutton's Ind. Lbr. Co. 1, 19-9s-12w, dr 1255 ft gbo. Yount-Lee's Miller 1, Lockport, 8-10s-9w, dr 6210 ft sandy shale, show of oil.

CAMERON PARISH — Magnolia's Sweet Lake Ld. Co. 1, Sweet Lake, dr 5905 ft lime. Shell's Watkins 15, Black Bayou, ru; Black Bayou State 1, dr 3077 ft shale and lime. Vacuum Oil Co.'s Cameron Meadows Ld. Co. 1, e Johnson Bayou, dr 4300 ft shale. The Texas Co.'s Calcasieu Lake State A-6, ru. Federal Pet. Co.'s Hebert 1, Hackberry, dr 6551 ft shale.

IBERIA PARISH—The Texas Co.'s State Vermilion Bay 5, dr 5975 ft hard sand. Lake Oil Co.'s Ben White 1, dr 2750 ft hard sand.

IBERVILLE PARISH—Standard's Wilbert 5, Bayou Blue, swabbing at 3225 ft; Wilbert 7, dk; Wilbert 8, dr 2631 ft lime; L. Baist Cooperage Co. 1, Bayou Blue, ru; E. B. & S. P. Schwing 1, Bayou Blue, dr 65 ft. Shell's Wilbert 5, White Castle, dr 3825 ft. Gulf's Gay 1, Bayou Choctau dome, lcn.

JEFFERSON PARISH — Humble's Delaware Fur Co. 1, 3 mi nw Lafitte, dr 2550 ft sandy shale.

LAFAYETTE PARISH—Pure's J. Manmotin 1, 5 mi n Lafayette, dr 6025 ft water sand.

LAFOURCHE PARISH—The Texas Co.'s L. L. E-Leeville 1, 27-21s-22e, sdtr 2635 ft, td 5600 ft.

PLAQUEMINES PARISH—Humble's Cockrell-Moran 2, Lake Grande Ecaille, driving piling; Cockrell-Moran 3, cavity in cap rock at 1560 ft; Lake Washington 1, Lake Grande Ecaille, preparing to abandon at 5425 ft. The Texas Co.'s Garden Island Bay State 4, dr 2725 ft shale.

ST. JAMES PARISH — Convent Oil Co.'s Jacobs 1, 28-11s-4e, dr 1900 ft.

ST. LANDRY PARISH—Hebert-Baker Oil Co.'s E. D. Fisher 1, 10-3s-4e, abn at 4385 ft.

ST. MARTIN PARISH — The Texas Co.'s Iberville Ind. Co. 2, Hager, ru; No. 3, lcn. Yount-Lee's Hebert 2, Anse La Butte, abn at 6215 ft in salt. Rycade's Woodyard Lake 1, Bayou Bouillon, dr 5400 ft sand and lime; State 4, Bayou Bouillon, lcn.

ST. MARY PARISH — The Texas Co.'s South Coast 1, 4 mi n Franklin, dr 7200 ft in shale and lime.

TERREBONNE PARISH — Chas. Paggi's Evergreen 2, Houma, dr 1800 ft. The Texas Co.'s Bay Junop 2, ru; Dog Lake A-3, moving in; Caillou Island State 4, lcn; No. 5, lcn; Lake Pelto State 4, 5 and 6, lcns; Bay St. Elaine State 5, lcn; Lake Barre State 5, dr below 1000 ft hard sand; No. 6, lcn; Four Isle 4, dr 1520 ft shale.

VERMILION PARISH—Gascon Oil Corp.'s Turkey Island 1, dr 2701 ft.

WEST FELICIANA PARISH — Putnam Synd.'s Como Plantation 1, 54-1s-4w, dr 3741 ft.

ARKANSAS

ASHLEY COUNTY—		
J. C. Marcum, McCurry 1, 10-19-4	*	3555
CALHOUN COUNTY—		
Tidal Oil Co., Ark. Timber 1, 3-16-14	*	3507

ASHLEY COUNTY—J. C. Marcum's McCurry 1, 10-19-4, sw abn, td 3555 ft, did not plug back for re-test.

CALHOUN COUNTY—Tidal Oil Co.'s Ark. Timber 1, 3-16-14, dry abn in red beds with strks sandy shale, td 3507 ft.

CLEBURN COUNTY — Cosden Oil Co.'s Donithan Lbr. Co. 1, 19-9-10, set 8¼-inch cas 3846 ft. Donnell et al's Fee 1, 33-11-9, dr 1660 ft.

COLUMBIA COUNTY—Sam Y. Dorfman's Merrick 1, 16-17-20, sd 650 ft.

FRANKLIN COUNTY—Red Bank Oil Co.'s Hamm 1, 33-10-26, blew out, est 3 mil ft gas top sand, arr set 6⅝ cas, td 3752 ft.

GARLAND COUNTY—H. H. Given's Garrett 1, 1-3n-19w, dr 3694 ft.

GRANT COUNTY—J. R. Lockhart's Cunningham 1, 11-5-16, dk.

HOT SPRINGS COUNTY—Cleary Bros. et al's Minson 1, 19-4s-16w, set 12½-inch cas 72 ft, set 10-inch cas 200 ft, junked hole 330 ft, moved 30 ft north sp set 15½ cas 20 ft, 12½ cas 294 ft, 10-inch cas 405 ft.

JOHNSON COUNTY—Ark. La. Pipe Line Co.'s Cline 1, set 7-inch cas 3325 ft, bailing cas. Blackwell O&G Co.'s Wyver 1, 21-8-23, jarring out 6-inch cas 2100 ft, td 5600 ft. Conn Gables et al's Holing 1, 20-9-25, sd 2070 ft.

LA FAYETTE COUNTY—Crawford Drilling Co.'s Vaughan 1, 25-19-25, rig up.

LAWRENCE COUNTY — Marguerite Dev Co.'s Broadway 1, 31-17-1, sd 45 ft.

LITTLE RIVER COUNTY—Buck Oil Co.'s Taafe 1, 25-12-32, sd 2505 ft.

LINCOLN COUNTY — B. F. Thompson, Tr.'s, McGehee 1, 8-8-7, rig up.

LOGAN COUNTY—M. W. Greesom's Parks 1, 21-8-24, sd 1309 ft. J. H. Flowers' White 1, 13-6-26, ur 5 3/16 in cas 3570 ft, td 3610 ft.

MADISON COUNTY—J. W. Baxter's Hallem 1, 17-16-26, sd 540 ft.

MILLER COUNTY—Lenz et al's Dale 1, se nw 25-15-26, 10-inch cas at 85 ft, old hole, arr deepen, td 2842 ft.

OUACHITA COUNTY — Anderson et al's Buck 1, 7-15-17, fsh 2732 ft. Belmoont et al's Buck 1, 16-15-17, dr 127 ft. A. B. Turner, Tr.'s, Brown 1, 23-15-19, set 10-inch cas 103 ft, wo.

PIKE COUNTY—Henderson et al's Tilyou 1, 26-8-24, lcn.

SCOTT COUNTY — Heavener O&G Co.'s Reser 1, 36-4-26, straightening hole, td 1530 ft.

SEBASTIAN COUNTY—M. W. Greesom's Spears 1, 9-7-29, tested sw, sd wo 3515 ft. Mansfield Gas Co.'s Fee 14, 1-4n-31w, sd for water 380 ft. Ozark Nat. Gas Co.'s Bates 1, se nw 28-8-30, lcn.

UNION COUNTY—Hickman et al's Hogg 1, 35-16-17, fsh 2157 ft. Marine Oil Co.'s W. B. Thompson B-2, 10-18-13, lcn. P. Winn Est. F-1, 10-18-13, rig up. Sunby et al's Perdue 2, 23-16-14, sd 3207 ft.

WASHINGTON COUNTY—Taylor et al's Runny 1, 1-13-29, sd 700 ft. Lincoln Lease Holding Synd.'s Townsite 1, 30-15-32, TA 1500 ft. C. H. Willoughby's Jones 1, 34-16-30, sd 2150 ft. O'Hara & Shetterley's Boyd 1, 12-16-32, TA 850 ft. Delbert Graves' Cunningham 1, 14-15-32, sd in gray sand 602 ft.

VAN BUREN COUNTY — J. S. Martin's Scanland 1, 5-9-13, sd 50 ft.

YELL COUNTY—T. Luckett's Balcon 1, 36-7-21, sdtr 5 3/16-inch cas 4120 ft, td 4160 ft.

MISSISSIPPI

HINDS COUNTY (Jackson Dist.)—		
Capital O. & G. Co., Brown 1, 28-6-1e	¶15	2503
Capital O. & G. Co., Clark 1, 10-5-1e	*	2628
LAUDERDALE COUNTY— (Meridian Dist.)—		
Lauderdale O. & G. Co., Lackey 1, 2-7-16	*	3434
Meridian Nat. Gas Co., Mattie Houser 1, 33-8-18	*	2826

ADAMS COUNTY (Natchez Dist.)—A. C. Glassell et al's Stowers 1, 28-8-2w, cor 1000 ft.

ALCORN COUNTY—Alcorn Pet. Co.'s Matthews 1, 14-2s-7e, fsh junktd 2735 ft.

CHICKASAW COUNTY — Hightower & Golson's Fleming 1, 30-13-3, sd 1414 ft. Fleming 2, 15-13-2w, dk pat.

HINDS COUNTY (Jackson Dist.)—Mrs. Ella Rawls Reeder's State Land 1, 25-6-1e, sd 2905 ft. Capitol O. & G. Co.'s Brown 1, 28-6-1e, topped Midway chalk 2499 ft set 6⅝ cas 2496 ft making est 15 mil ft gas 5 ft midway chalk td 2503 ft elev 302 ft. Clark 1, 10-5-1e, set 8¼ in cas 2490 ft topped midway chalk 2501 ft sw abn td 2628 ft elev 266.3 ft. Dome O. & G. Co.'s Elton 1, 5-4-1e, dr to 2807 ft still in Wilcox arr plug back to test gas shows at 818 ft and 1334 ft. Jackson O. & G. Co.'s Central Cotton 1, 3-5-1e, dk Mayes 2, 2-5-1e, arr dr plug after setting 6⅝ cas top chalk 2439 ft elev 270 ft. Love Pet. Co.'s Dreyfuss 1, 10-5-1e, dr rock 1670 ft. Marine O. & G. Co.'s Country Club 1, 31-6-1e, dry abn in igneous wash td 3063 ft igneous wash topped 3042 ft. Miss Tex Oil Co.'s Negro Fair Assn 1, 28-6-1e, rig up. Tri-State O. & G. Co.'s Wilson 1, 23-6-1e, dk Universal O. & G. Co.'s Holliday & Ross 1, 8-6-2e, dr 2412 ft. Sharbrough 1, 28-6-1e, set 10-in cas 88 ft wo. Feazel O. & G. Co.'s Millstein 1, 2-5-1e, dr 1762 ft. Gulf Ref. Co.'s Crane-Lawrence 1, 26-6-1e, sp. City of Jackson 1, 10-5-1e, rig up. Miss. Pet. Co.'s Solvent Inv. Co. 1, ne sw sw 14-5-1w, lln. Love Pet. Co.'s Ridgeway 1, 2-5-1e, rig up. LeFleur O. & G. Co.'s Brown-Chadwick 1, 11-5-1e, dk.

KEMPER COUNTY (De Kalb Dist.)—W. W. Jones' Rosenbaum 1, lcn not given, dk.

LAFAYETTE COUNTY—F. E. West et al's May 1, 22-10-1w, rig up wo.

LAUDERDALE COUNTY (Meridian Dist)

—Lauderdale O. & G. Co.'s Lackey 1, 2-7-16, dry abn td 3434 ft. Meridian Nat. Gas Co.'s Mattie Houser 1, 33-8-18, dry in sandy shale td 2826 ft.

MADISON COUNTY (Jackson Dist.)—Miss. Pet. Co. Inc.'s Raymond 1, 32-7-2e, sp dr 200 ft (formerly Kennedy et al's test.

MONROE COUNTY (Amory D'st.)—Amory Dev. Co.'s Bourland 1, 2-13-19, sd wo 2912 ft. Park Bowser's Cowart 1, 2-12-19 sd 85 ft. Associated Royalties' School Board 1, 16-15-17w, sp sd 60 ft.

RANKIN COUNTY—(Jackson Dist.)—Love Pet. Co.'s Moore 1, 28-6-2e, sd 900 ft. Redmond et al's Graves 1, 12-5-1e, dk. Ohio Oil Co.'s Payne 1, 12-5-1e, topped black shale 2303 ft blowing wild with gas td 2395 ft elev 268.8 ft. Gulf Ref. Co.'s Hartfield A-1, 7-5-2e, sp set 15½ cas 93 ft dr 390 ft. Pearl River D. & G. Co.'s Pate 1, 12-5-1e, rig up. Southern Pet. Co.'s Investment 1, 12-5-1e, dk.

WARREN COUNTY (Vicksburg Dist.)—Henderson et al's Dornbusch 1, 8-18-15, sd with ds in hole td 2475 ft.

WEBSTER COUNTY — Cumberland Oil Co.'s Henley 1, 15-21-11, TA 1865 ft.

WILKINSON COUNTY (Natchez Dist.)—A. C. Glassell et al's Belz-Hoover 1, 1-5-2w, sd wo 4016 ft.

YALABOUSHA COUNTY (Water Valley Dist.)—J. D. Collett et al's Blackmer 1, 14-11-4w, fsh junk td 2434 ft.

ALABAMA

HOUSTON COUNTY—J. R. Sealey's Fee 1, 13-1n-27e, changing from cable tools to rotary td 3100 ft.

LAUDERDALE COUNTY—P. J. McAlpine's O'Neal Hrs 1, 8-2s-13w, reset 8¼-in cas in white limestone did not stop water flow sd in white limestone 1910 ft.

MORGAN COUNTY—Albany-Decatur O. & G. Co.'s English 1, 6-6-4 fsh for cas 4130 ft.

SUMTER COUNTY—B. W. Bates' Fee 1, 3-18-1w, TA 1200 ft, Fee 2, 3-18-1w, rig up wo.

WASHINGTON COUNTY—Hobson et al's Wilson 1, 27-7-1w, sd in limey shale 881 ft. Hobson Bros. 1, 9-8-2w, sd 1450 ft. Oscar Brown's U. S. Land & Cotton 2, 25-3-2w, no report.

TENNESSEE

DECATUR COUNTY—Chaster County O. & G. Co.'s Montgomery 1, sd 1881 ft.

MOUNTAIN STATES

WYOMING

BIG HORN—P. & R.'s Govt 3, 24-56-98, sd for orders td 4234 ft. Westland Oil, Inc. 1, 24-54-95, gas at 510 ft. Wisconsin Holdings, 5-55-97, sd 665 ft. Yellowstone Pet. Co.'s 1, 7-57-97, dr 3912 ft.

CARBON—Red Feather Oil Co. 1, 35-13-92, spdd.

FREMONT—Texas Prod. Co.'s State 1, 36-34-96, mud off at 4472 ft. P. & R.'s 1, 33-34-92, repair boilers, td 4075 ft.

HOT SPRINGS—Midwest's Weeks 8, 5-55-98, dr 2850 ft. Ohio's Smith 1, 8-46-99, wait for rotary 4403 ft. Gebo Con's 1, se 23-44-95, dr bel 1416 ft, gas and oil showing.

JOHNSON—United Oil Co.'s 7-47-92, sd 1700 ft.

LINCOLN—Midwest's Grey's River 1, 25-37-117, dr 2310 ft. Mtn Oil Corp. 1, 36-25-1115, fsg 815 ft. Wyo. Prod. Co.'s 1, 14-24-113, res 370 ft.

NATRONA—Midwest's Midway 1, se 23-35-79, bailing to test at 5187 ft. Golden West Oil Co.'s 1, 26-36-11, spdg. Cuyler Oil Co. sw 24-36n-85w, spdg. Summit Oil Co., nw 21-33n-80w, dr 510 ft.

NIOBRARA—West Virginia Synd. ne 7-35-62, dr 400 ft.

PARK—P. & R.'s Pitchfork 1, 14-48-102, dr 3868 ft, hfo. Resolute Oil Co.'s 1, 17-27-101, dr bel 5340 ft. Cody Pet. Co.'s Danker 1, se 22-57-98, skd rig. C. M. Johnson's 1, 11-49-102, dr bel 4208 ft.

SWEETWATER—Vermillion Oil Co.'s 1, se 16-12-99 stand with 10-in cem 2650 ft.

SHERIDAN—Pfeiffer et al, 6-57-84, location.

UINTA—Park City O. & G. Co., nw 6-51-113, dr 1200 ft.

WESTON—Gose Synd's, 1, 28-47-65, res 4800 ft. Updike et al's Fiddler Creek 1, 11-45-64, dr bel 1200 ft.

NEW MEXICO

DEBACA—Matador Oil Co.'s Wood 1, se 6-4n-20e, co 3005 ft. Skelly Oil Co., Fowler 1, nw 31-18s-38e, dr 1800 ft.

EDDY—Lockhart et al's Parker 2-X, se 3-17s-30e, dr 3020 ft.

LEA—Hobbs High Co.'s State 1, se 35-18s-38e, stand 3790 ft. Landreth Prod. Co.'s State 1, 7-18s-38e, dr 4560 ft. Amerada's State 1-A, ne 32-18-38, 12,000 bbls. at 4162 ft. California Co.'s State 1, se 29-18s-38e, dd 4182 ft. Humble O. & R. Co.'s Bowers 2-A, 30-18s-38e, test 4208 ft. Shell Pet. Corp.'s State 2, ne 32-18s-36e, dr 4135 ft. Morton et al's State 1, ne 32-11s-38e, stand 5275 ft. Tidal's Coleman 1, ne 17-21s-36e, dr 3860 ft. Atlantic Oil Co.'s State 1, ne 6-19s-38e, dr 3200 ft.

McKINLEY—J. W. Halsell's Santa Fe 1, 17-18-9w, dr 3267 ft. Wms. et al's A. T. S. F. 1, sw 19-18n-8w, dr 2280 ft. Walker Dome Oil Co.'s 1, 12-15-10, stand at 1012 ft.

QUAY—Silverstein et al 1, 29-12n-33e, spdg 85 ft.

RIO ARRIBA—Berringer et al's Hartman 1, ne 8-29n-7w, sd 825 ft. San Juan Pet. Co.'s Govt. 1, se 14-30n-7w, dr 436 ft.

SAN JUAN—Dorothy Oil Co.'s Terwilliger 2, 29-30-9w, dr 1890 ft. Southern Union Gas Co.'s Day 1, se 20-28n-10w, wtg for pipe at 1902 ft. Childers Dr. & Pr. Co.'s Westwater 2, nw 23-31-16w, sd 2525 ft. Reserve Oil Co.'s Shafer 2, ne 1-21n-14w, sd 780 ft. Rio Grande Dev. Co.'s Lanier 2, 9-29-11w, dr 1315 ft.

SAN MIGUEL—Pioneer O. & G. Co.'s Thunderbird 1, nw 14-15n-16e, wait 2355 ft. Starr O'l Co.'s Adams 1, ne 25-17n-16e, 8⅝-in at 3217 ft. Cibola Pet. Co.'s Crown 1, se 9-13n-14e, ready to resume 320 ft. Hershfield Dev. Co.'s Cabra Springs 1, ne 21-12n-22e, dr 1262 ft.

SOCORRO—Lockhart & Co.'s Stackhouse 2, 14-3s-6e, dr 2880 ft.

TORRANCE—Williams et al's Staplin 1, ne 16-8n-10e, stand 1643 ft. J. B. Witt O. & G. Co.'s Kutchem 1, 12-17s-7e, dr 1219 ft.

VALENCIA—Rio Puerco Oil Co., N. M.-Ariz. Land Co. 2, ne 13-6n-2w, wtg pipe 3145 ft. Acme Oil Co.'s N. M.-Ariz. Land Co.'s 1, 26-6-3, stand 4741 ft. Harlan et al's Harlan 1, 5-6n-2e, dr 4410 ft.

COLORADO

ADAMS—N. M. Slatt 1, se 27-25-64w, dr 2000 ft.

ARAPAHOE—McDebb Dr. Co.'s Fitzsimmons 1, 7-4S-66, prep to run 4½-in to 5692 ft. Merritt et al' U. P. 1, nw 17-5s-64w, dr 200 ft.

ARCHULETA—Outwest Inv. Co.'s Fitzhugh 1, se 34-33n-1e, dr 425 ft.

BACA—A. R. Jones Oil & Optg. Co.'s Boice Cattle 1, 22-34s-42w, dr 2730 ft.

BOULDER—Reliance Oil Co.'s Anderson 1, sw 18-3n-70w, dr 845 ft.

DELTA—Crawford O. & G. Co.'s McKissen 1, ne 28-15s-91w, stand 1100 ft.

DOLORES—Transcontinental's Glade 1, nw 11-41n-16w, dr 6773 ft.

DOUGLAS—Perry Park Oil Co.'s Cannon 1, nw 11-9s-69w, dr 1600 ft.

EL PASO—Utemore Syndicate's Carson 2, ne 10-16s-66w, dr 1056 ft.

GARFIELD—Fulton Pet. Co.'s Permit 1, ne 8-8s-102w, dr 1430 ft.

JEFFERSON—Ruby Hill O. & G. Co.'s Braden 1, se 24-4s-59w, co 3568 ft.

HUERFANO—Parker Club-Kinney Coastal's Fee 1, se 4-28s-69w, sidetr 4116 ft. Ojo Exp. Co.'s Ojo 1, 5-29s-69w, dr 505 ft.

LARIMER—Smith et al's State 1, ne 36-12-70w, spdg 95 ft.

LAPLATA—McGarr Pet. Co.'s Mesa 1, ne 37-33n-12w, dr 2265 ft. Detroit Oil Assn.'s Olbert 1, se 9-35n-12w, stand 2623 ft. Murchison Oil Co.'s Doescher 1, nw 9-33n-13w, dr 490 ft.

LINCOLN—Kelly Oil Co.'s State 1, ne 26-14n-57w, stand 3415 ft.

MESA—Argo Oil Co.'s Hoel 1, ne 23-8s-104w, co at 2757 ft, td 3000 ft.

MOFFAT—Vermillion Oil & Gas Synd.'s 1, se 23-9n-100w, stand 750 ft. Midwest's Hannawalt 24, 4-6n-92w, dr by tools at 2935 ft. Mtn. Fuel Supply's 1, 35-12-101, test 2165 ft. Mtn. Fuel Supply's Musser 1, 5-11-97, dr 1770 ft. S. H. Keoghan et al's State 1, sw 15-4n-101w, dr 2510 ft.

MONTEZUMA—Haller et al's Haller 2, 33-36n-14w, dr 665 ft.

MORGAN—Ind. Terr. Illum. Oil Co.'s State 1, ne 16-1n-7w, dr 2810 ft.

PARK—So. Park Oil Co.'s Milligan 1, se 13-9s-76w, casing 800 ft. So. Park O. & G. Co.'s Esche 1, ne 5-9s-76w, dr 455 ft.

RIO BLANCO—Texas Prod. Co.'s Potter 1, se 30-2n-69w, gas at 5987 ft, blow to co. Magnolia Pet. Co.'s Fordham 1, sw 9-2s-96w, plugg back to save gas at 5130 ft.

WELD—Platte Valley Pet. Corp.'s Patterson 1, se 24-6n-61w, stand 6324 ft, title difficulty.

WASHINGTON—Middlemist Oil Co.'s Middlemist 1, se 14-4s-56w, stand 1260 ft.

MONTANA

CASCADE—Andover Oil Co.'s Floweree 1, se 20-21-2w, stand 800 ft.

CHOTEAU—Texas Pacific, Lehnfelt 1, rigging up.

FERGUS—Melton Corp.'s 1, se 24-21n-17e, dr bel 2700 ft.

GLACIER—Glacier Oil Co.'s Omsberg 1, nw 35-35-5w, fsg job completed, td 1440 ft. Texas Prod. Co.'s 1, 13-35n-6w, dr 1805 ft. Fulton Pet. Corp.'s Blackfoot 1, ne 28-36n-12w, rigging. O'Neil's Michaelson 1, se 28-36-5w, gassing. B. & H. Oil Co.'s Haines 1, se 2-34-6w, wait for pipe 400 ft. Jeffries-Haire's Dawson 1, ne 7-31-12w, dr 150 ft.

GOLDEN VALLEY—Golden Valley Oil Co.'s 1, se 28-6-22, de bel 1200 ft. Texas Pacific, sw 21-8s-21e, location for rotary test.

LIBERTY—Square Deal O'l Co.'s Federal Land Bank 1, 1-32n-7e, resum at 3575 ft. Northland O. & G. Co.'s Yurman 1, 36-33n-6e, dr 2300 ft. Sunburst O. & R. Co.'s McLaren 1, se 9-37-6e, run cas 2550 ft. Utopia Oil Co.'s Eleanore Assn. 1, sw 11-33-6e, set cas 2400 ft. Western National Gas Co.'s H. Brown 1, nw 20-37-4e, rig up.

MUSSELSHELL—Minnesota - Flatwillow's Ivanhoe Dome test 7-11-31, rigged.

PETROLEUM—Minnesota - Flatwillow's 2, 5-13n-25e, rig burned down, td 1840 ft. Oregon-Flatwillow's 1, 3-13n-26e, resuming 200 ft.

PONDERA—Miller Bros.' Bruns 1, nw 17-28n-1w, rig up. Oil Well Dr. Co.'s Van Daele 1, ne 35-30-3w, fish tools 4215 ft.

ROSEBUD—Prairie O. & G. Co.'s N. P. 1, 9-10-39e, sd 2310 ft. Prairie's N. P. 4, 28-10n-38e, spd 260 ft. Prairie's 1-X, 26-10-39e, dr 550 ft.

SHERIDAN—Sheyenne O. & G. Co.'s 1 nw, 15-36n-53e, to res at 1400 ft.

STILLWATER—Gas Dev. Co. se 17-2n-20e, to abdn at 1400 ft.

TETON—Andover Oil Co.'s Carlson 1, ne 5-24n-4w, td 300 ft. Newman et al's Fitzgeralds 1, 26-32n-1w, rig up. Rocky Mtn. O. & G. Co.'s Salmond 1, ne 4-23n-8w, stand 1700 ft. Midwest Ref. Co.'s Scott 35, ne 2-26n-6w, dr 1000 ft.

TOOLE—Anaconda Pet. Co.'s Barthelote 1, nw 19-36n-2w, to dd from 1600 ft. John Thomas et al's Buckley 1, ne 1-37-4w, td 1645 ft. Mont. Oil Corp.'s Beaupre 1, se 32-37-1w, sd 2320 ft. International Roy. Hold. Co.'s Henry 1, se 26-35-3e, carry pipe at 2165 ft. Vantana Oil Co.'s Peterson 1, sw 22-34-4w, dr 1450 ft. O. I. C. Gas Co.'s Wolland 1, se 11-34-2e, rig up.

VALLEY—T. P. Jones' 1 nw 31-37-38e, test gas at 1090 ft.

OKLAHOMA

WOODS COUNTY—T 27n, R 16w, Sec. 33, Sinclair, Share 1, c ne sw, td 7136 ft, dr cement show oil 7137-7138½ ft.

ALFALFA COUNTY—T 27n, R 11w, Sec. 12, Smith Bros., Forbes 1, ne c se nw nw, td 1420 ft sd.

KAY COUNTY — T 27n, R 2e, Sec. 17, Blankenship et al, Hansen 1, sw nw sw sand 3587-97 ft, td 3616 ft, shot 10, 20 and 40 qts pump 19 bbls.

HARPER COUNTY—T 26n, R 24w, Sec. 14, Sinclair, Howell 1, c sw sw, td 8590 ft pb 6700 ft, shot 5 qts 5300-40, 7M gas, fsh pipe.

GRANT COUNTY—T 26n, R 5w, Sec. 25, Bu-Vi-Bar et al, Hurst 1, c sw, dr 3837 ft.

KAY COUNTY — T 26n, R 1w, Sec. 32, Boucher et al, Jefferson 1, ne c sw, rig up.

HARPER COUNTY—T 25n, R 20w, Sec.

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The T-I-W-CHRISTIAN gives you all the advantages of a short bit, without the disadvantages of either. Water courses leading direct to the cutting edge give the pressure at the bottom and the speed of a short bit, while retaining the straight hole advantages of a long bit.

Builds Up Sidewall

The oval shape of the bit is the result of successful experiments to construct a bit that would contribute to the building up of the side wall. This shape tends to plaster or shove the mud out into the wall, helping to build it up.

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The application of the principle of greater strength from tubular construction will be noted in the T-I-W-CHRISTIAN BIT. There is only one hole through the shank and body of the bit and that right through the center, thus obviating the reduction of strength that takes place when holes are drilled through the outer radius at points of greater torsion.

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12, Empire, Bruce 1, sw c ne ne sw, rust 5579 ft.

WOODS COUNTY—T 25n, R 15w, Sec. 10, Bu-Vi-Bar et al, Fee 1, se c sw, sd 6104 ft.

GRANT COUNTY—T 25n, R 4w, Sec. 22, Cowden, Vollmer 2, ne c se ne sw, lost tools 5640 ft, sd.

ALFALFA COUNTY—T 24n, R 11w, Sec. 14, J. V. Bailey et al, Acre 1, c sw ne, salt water 4649 ft, 8-inch 4660 ft, woc.

GARFIELD COUNTY—T 24n, R 6w, Sec. 9, Pulse & Beamer, White 1, se c nw, sand 5566-70 ft, hfw, dr 5625 ft.

WOODWARD COUNTY — T 23n, R 17w, Sec. 23, Transcontinental & Prairie, Wilbur 1, ne c, sd 7425 ft.

GARFIELD COUNTY—T 23n, R 4w, Sec. 32, Shell et al, Loomis 1, c nw nw, show oil and wtr 6132 ft, wx 6185 ft, td 6277 ft.

WOODWARD COUNTY—T 21n, R 19w, Sec. 15, Burgoyne Bros., Merklin 1, sw c se ne, sd 1910 ft.

BLAINE COUNTY—T 19n, R 10w, Sec. 13, Washoma Pet. Co., Phillips 1, c nw sw, 3220-25 ft, hfw, sd 3730 ft for water.

LOGAN COUNTY—T 18n, R 3w, Sec. 33, Healy et al, Quier 1, se c sw, sd 3970 ft. T 17n, R 4w, Sec. 34, Eason Oil Co., Katchor 1, sw c ne sw, dr 3556 ft. T 17n, R 1e, Sec. 22, Prairie & Slick, Simms 1, ne sw se, dr 2460 ft.

KINGFISHER COUNTY — T 17n, R 7w, Sec. 6, Gault Brown, Boch 1, c nw se (owdd) td 6022 ft, dr on iron.

LOGAN COUNTY—T 16n, R 1w, Sec. 33, Prairie & Slick, Morgan 1, c nw ne, dr by tools 5346 ft.

PAWNEE COUNTY—T 23n, R 5e, Sec. 15, Cochran et al, McFadden 1, ne c sw, rig.

OSAGE COUNTY—T 23n, R 5e, Sec. 17, Western American 1, nw c se hfw 1830-94 ft, td 3032 ft sd.

PAWNEE COUNTY—T 22n, R 3e, Sec. 26, Wentz, Lillie 1, se c sw ne, dr 1962 ft. T 20n, R 5e, Sec. 22, J. M. Scott et al, Jones 1, sw c ne, dr 2250 ft.

PAYNE COUNTY—T 18n, R 4e, Sec. 6, F. M. Marrs et al, Tietz 1, sw nw se, location abandoned.

LINCOLN COUNTY—T 17n, R 2e, Sec. 28, Thurman, Deaner et al, Stufflebeam 1, ne c sw, 6-inch at 4810 ft. T 14n, R 6e, Sec. 5, Atlantic, Ryan 1, se s nw, dr 3295 ft. T 13n, R 4e, Sec. 2, Magnolia, Winchip 1, ne c sw, dr 4875 ft.

OKFUSKEE COUNTY—T 12n, R 9e, Sec. 36, Henry Oil Co., Harjo 1, nw c, water 3910-20 ft sd. T 12n, R 10e, Sec. 3, Sheppard et al, Sheppard 1, se nw sw, td 3690 ft, water sd.

MUSKOGEE COUNTY—T 11n, R 19e, Sec. 2, E. Mills et al, Martin 1, nw c se, sd 4001 ft.

PITTSBURG COUNTY—T 9n, R 16e, Sec. 32, Pattison et al, McDuff 1, sw nw se, Wilcox 5556-60 ft, sd.

HASKELL COUNTY—T 9n, R 18e, Sec. 10, Marion Oil Co., Sanders 1, nw ne sw, 2M gas 1800 ft, sd 2692 ft.

OKLAHOMA COUNTY—T 14n, R 3w, Sec. 32, Mid-Kansas, Messer 1, sw c, td 6364 ft, bailing. T 1w, R 3w, Sec. 17, Prairie & Slick, Dills 1, c se nw, Wilcox 6302-21 ft, hfw, sd. T 13n, R 3w, Sec. 35, Magnolia & Ramsey, Johnson 1, ne c sw, top wx 7133 ft, dr 7198 ft. T 12n, R 4w, Sec. 17, C. F. Cuniff, Trustee, St. Joseph Orphanage 1, sw ne sw se, sd, td 6700 ft. T 11n, R 2w, Sec. 3, Ryan Consolidated, Lawton 1, ne c nw, td 6902 ft, woc.

CLEVELAND COUNTY—T 7n, R 1e, Sec. 20, Harris & McNeal, Corbett 1, c sw ne, td 6518 ft, 6-inch 6330 ft, bailed show oil, gas and water, rur.

OKFUSKEE COUNTY—T 11n, R 8e, Sec. 11, Carter et al, Keys 1, sw ne sw, hfw 2660 ft, co.

HUGHES COUNTY—T 9n, R 1w, Sec. 29, Chas. Cannady, Kanard 1, nw c sw, Wilcox 4468-4505 ft, hfw, pb to 3540 ft, sd.

POTTAWATOMIE COUNTY—T 8n, R 3e, Sec. 3, Texas Co., Knight 1, sw c se, dr 3340 ft. T 8n, R 4e, Sec. 11, Lippa Drlg Co., et al, Helmerich 1, ne c nw, dr 3610 ft. T 6n, R 4e, Sec. 30, Deep Rock, Marshall 1, sw c dr 2920 ft.

SEMINOLE COUNTY—T 6n, R 7e, Sec. 9, Neal & Milton, Thomas 1, nw ne sw, cellar.

ROGER MILLS COUNTY—T 12n, R 24w, Sec. 23, Bucy & Stone, Williams 1, c sw, sd 2243 ft.

BECKHAM COUNTY—T 10n, R 22w, Sec.

29, J. F. Cuniff et al, Brower 1, c nw, sd 3793 ft.

CANADIAN COUNTY—T 10n, R 6w, Sec. 1, J. V. Bailey, Robinson 1, c ne nw, sd 150 ft.

CADDO COUNTY—T 9n, R 13w, Sec. 18, J. J. Wright & Shell, Boys 1, ne c, lcn.

BECKHAM COUNTY—T 8n, R 22w, Sec. 20, Carson et al, Denby 1, sw se ne, 1625 ft dr cement.

GREER COUNTY—T 7n, R 22w, Sec. 1, Roy Good & D. M. Dowell, Cliffel 1, nw c, sd 1265 ft. T 7n, R 24w, Sec. 17, I. T. I. O. et al, Fee 1, c ne, dr 2440 ft.

CADDO COUNTY—T 6n, R 11w, Sec. 24, Simms Pet. & J. R. Wrightsman 1, se c nw, rig.

HARMON COUNTY—T 4n, R 24w, Sec. 17, Harmon-Tex Oil Co., Headley 1, ne c, sd 2334 ft, for casing.

COMANCHE COUNTY—T 3n, R 9w, Sec. 3, Okla. Nat. Gas Co., Doevel 1, ne c sw sw sw, sd 1450 ft.

COTTON COUNTY—T 4s, R 13w, Sec. 2, Shasta Oil Co., McMillian 1, c se se, dr 1870 ft.

HUGHES COUNTY—T 9n, R 1w, e Sec. 29, Erwin et al, Jones 1, se c ne, sand 4270-75 ft, rust. T 5n, R 11e, Sec. 15, J. J. Wright, Roberts 1, se c sw, 2M gas 915-18 ft, sand 1600-34 ft, hfw, sd 1645 ft.

GARVIN COUNTY—T 4n, R 3e, Sec. 10, C. R. Obermyer, Stricklin 1, ne c sw, sd 2880 ft. T 3n, R 4w, Sec. 5, McMin & Arrowsmith, Carson 1, ne c nw, dr 2600 ft.

COAL COUNTY — T 3n, R 9e, Sec. 26, Blackwell, Gumm 1, nw c sd 3065 ft for water.

ATOKA COUNTY—T 3s, R 10e, Sec. 18, Brockshire et al, Guinn 1, nw c, sd 80 ft.

CARTER COUNTY—T 4s, R 2e, Sec. 32, Tex-Okla. Dr. Co., Anderson 1, se ne se, 2580 ft, fsh.

LOVE COUNTY—T 6s, R 3w, Sec. 20, Harry Hobbs, Steele 1, sw c ne ne sw, sd 3130 ft.

BRYAN COUNTY—T 6s, R 7e, Sec. 8, G. L. Pace, Hicks 1, sw c nw, sd 850 ft. T 6s, R 7e, Sec. 14, W. A. Johnson, Usserry 1, se c, sd 325 ft. T 6s, R 9e, Sec. 35, O. P. Bush, Commerce Trust Co. 1, ne c, sd 600 ft.

NORTH LOUISIANA

Completions

Company, Well and Location	Initial Production Bbls.	Depth
BIENVILLE PARISH—		
Ark. La. Pipe Line Co., Graves 1, 22-16-10	*	2620
CLAIBORNE PARISH—		
Leue Oil Co., Taylor 1, 16-22-6w	*	3004
CADDO PARISH—		
Falcon Drilling Co., Oden 1, 20-19-14	*	2475
FRANKLIN PARISH—		
Davis et al, Moore 1, 12-11-6e	*	1430
RICHLAND PARISH—		
Austin & McDonald, Millsaps 2, 17-17-6e	*	2697
Austin & McDonald, Millsaps 3, 16-17-6e	*	2477
SABINE PARISH (Zwolle)—		
McDaniels et al, N. L. Batson 1, 16-8-12	*	2526
Pelican Nat. Gas Co., La. Long Leaf Lbr. Co. 3, 4-7-11	¶8-1000	2344
Loring Oil Co., Peavy-Wilson 1, 21-6-13	*	4792
WEBSTER PARISH—		
S. H. Riggs, Tr., L&A 1, 1-22-11	*	2100

BIENVILLE PARISH — Ark. La. P. L. Co.'s Graves 1, 22-16-10, sw abn, td 2620 ft. Nichols et al's McDermott 1, 28-16-6w, tested 1 fourble mud 10 ft oil ds mov in hvy rig replace one blown down by storm, 6-inch cas to be set, td 2358 ft. S. P. Borden et al's Tomas 1, 27-16-9w, set 10-inch 300 ft, dr 400 ft.

BOSSIER PARISH—Andrews & Davlin's Nattin 1, 15-22-14, 18 ft bro snd arr ds test, td 1499 ft. Autrey Oil Co.'s Johnson 1, 34-19-11, sd for fuel 60 ft; McDade 1, 28-19-11, dr 1460 ft. Morgan et al's Kendricks 2, 22-19-11, topped sand 1792 ft, tested 10 mil ft gas through ds 1760-1800 ft. Triangle Drilling Co.'s Bolinger 1, 36-23-13, dr 1200 ft.

CADDO PARISH — Falcon Drilling Co.'s Oden 1, 20-19-14, 9 ft bro sand dry abn, td 2475 ft. L. B. Mawk's Swann 1, 23-21-14, sd for fuel 700 ft.

CATAHOULA PARISH—Nick Barnare et al's McGraw 1, 30-10-9e, dr 2500 ft. National

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O&G Co.'s Kirkland 1, 35-9-10e, tested dry 3079 ft, arr deepen. La. G&F Co.s' Tensas Delta A-1, 23-6-5e, sp dr 172 ft.

CLAIBORNE PARISH—El Dorado Chief Oil Co.'s Dance 1, 27-20-7w, sd 2240 ft. Leue Oil Co.'s Taylor 1, 16-22-6w, dry abn, td 3004 ft. Triangle Drilling Co.'s Cox Fee 1, 6-19-5w, dr lime and pyrites 3674 ft. Baird Bros. et al's Whittaker 1, 30-20-7w, dk.

CONCORDIA PARISH—A. C. Glassell et al's Pittsfield Plantation 1, 41-8-10e, sd wo 1453 ft. Joe Marr et al's Maxwell 1, 35-3n.8e, set 8-inch cas 2000 ft, td 2820 ft.

DE SOTO PARISH—Ark. La. Pipe Line Co.'s Johnson 2, 7-11-13, tested dry 2904 ft, cor shale 3017 ft. Joe Burnham et al's Hood 1, 30-11-14, arr set 6⅝ cas 2330 ft, claim 4 ft sand and show oil, td 2356 ft. Mich-Louzanna O&G Dev. Corp.'s Payne 1, 12-11-16, sd wo 2070 ft. Gulf Ref. Co.'s Dry et al 1, 14-11-15, cor shale 2832 ft. J. W. Clark's Platt 1, 23-13-14, topped chalk 1513 ft, cor 2760 ft. Odell & Lawton's Tidwell 1, 11-13-14, dry through ds 2954 ft, arr deepen. T. L. Philp's Talbot 1, 9-13-13, dk. Pelham & Bundy's Rhodes 1, 32-13-14, show oil through ds 28-17-92 ft, setting 6⅝ cas 2800 ft. Frank Melat's Schryver 1, 35-14-13, wosr 150 ft oil hole td 2819 ft. J. W. Clark's Tidwell 1, 23-13-14, rig up. R. O. Roy's Nelson 1, 36-15-13, dr 2500 ft. Standard Oil Co. of La.'s Dowling Bros. 2, 5-13-13, dr shale 2821 ft. S. A. Guy et al's Dowling Bros. 1, 31-14-14, dk.

JACKSON PARISH—El Dorado Chief Oil Co.'s Southern Adv. Paper Co. 1, 35-15-4w, sd 1083 ft.

LINCOLN PARISH—Ark. Fuel Oil Co.'s Lewis & Co. 1, 26-20-4w, set 6⅝ cas 4234 ft, tested 1000 ft sw no show oil or gas, wo, td 4292 ft.

MOREHOUSE PARISH—Pelican Nat. Gas Co.'s Tensas Delta 1, 17-18-6e, rig.

NATCHITOCHES PARISH—W. M. Coates et al's Collins 1, 28-9-10, cemtd 6⅝ cas 2224 ft, wo water to drill in, td 2270 ft. J. W. Cooper et al's Cooper 1, 35-11-10, sp set 10-inch cas 81 ft. Robeline O&G Co.'s Winn 1, 7-8-9w, sd in rock 1635 ft. S. D. McDaniel's Clark-Morse 2, 23-5-6w, sd 2536 ft.

RAPIDES PARISH—Ayers Bros' Wicklipp 1, 9-5n-2e, dr 3501 ft.

RED RIVER PARISH—E. C. Lucas' La. Delta Pecan Co. 1, 34-13-11, set 6-inch cas 2440 ft, 17 ft sand blg to test, td 2476 ft. Geo. L. Pace et al's Clarkson 1, 30-12-9, dr 2320 ft. Lucky Strike Oil Co.'s Chaffraix 1, 33-12-10, sp set 10-inch cas 90 ft, dr 450 ft.

RICHLAND PARISH — Austin & McDonald's Millsaps 2, 17-17-6e, sw abn td 2697 ft; Millsaps 3, 16-17-6e, sw abn td 2477 ft; Hunt 1, 13-17-5e, set 8-inch cas 921 ft. W. C. Feazel's Landrum 1, 6-16-7e, dk. International Gas Prod. Co.'s LaGrone 1, 7-16-7e, lcn. Island O&G Co.'s Noe 1, 3-16-5e, set 12-inch cas 188 ft, set 8-inch cas 857 ft.

SABINE PARISH — Magnolia Pet. Co.'s Giaque 1, dr hd black shale 2203 ft. McDaniels et al's Batson 1, 16-8-12, dry abn td 2526 ft; Batson 2, 16-8-12, sp 10-in cas 102 ft, dr 615 ft. Loring Oil Co.'s Peavy-Wilson 1, 21-6-13, junked abn, ds stuck, td 4792 ft; Shull 2, 26-8-12, rig up; Schuffert 1, 27-8-12, arr set 6⅝ cas 2376 ft. Huber & Mann's Newton 1, 25-8-12, sp 10-inch cas 83 ft, dr 850 ft. Lanier & Tarver's Newton 1, 25-8-12, rig up. Texas Co.'s Giaque 1, 27-8-12, sp 10-inch cas 103 ft. Lacey Barkett Oil Co.'s Danna 1, 26-8-12, dk. Lacey Pet. Co.'s Tatum 1, 26-8-12, rig up. R. L. Gay, Tr.'s, Bowman-Hicks 8, 18-7-13, sd 2552 ft; Sabine Lbr. Co. 5, 15-7-14, dr 1179 ft. Le Grande et al's J. W. Hale 1, 1-7-13, lcn. D. H. Reddick et al's Scretchfield 1, 18-9-12, sd 3280 ft. Paramount O&G Co.'s Woolums 1, 11-6-12, sd 2225 ft. Zeke Lohman's Wyatt Lbr. Co. 1, 18-4-11, rig up. Lohman & Walker's Hubley 1, 21-7-11, arr set 8-inch cas 1313 ft after gas blow out 1311-13 ft. Pelican Nat. Gas Co.'s La. Long Leaf Lbr. Co. 3, 4-7-11, set 6-inch cas 2318 ft, topped marl 2331 ft, flowest 8 mil ft 1000 bbls 40.2 gravity oil through choke, td 2346 ft. La. Long Leaf 4, 4-7-11, rig up; Sabine Lbr. Co. 3, 6-7-11, elev 259.9 ft top marl 2225 ft, set 6-inch cas 2222 ft, dry 2337 ft, blg to test in chalk, td 2408 ft. Stacey et al's Polly 1, 18-8-12, rig up. Longoria et al's Belton 1, 31-9-12, rig up. Boone, Tr.'s, Hill 1, 4-6-11, dk. A. C. Glassell's Logan Oil Co. 1, 23-10-13, sd for water 1535 ft.

TENSAS PARISH—A. R. Willis' Curry 1.

39-11-12, sd 2300 ft. Stovall Drilling Co.'s Miller 1, 18-10-10e, ds 675 ft.

UNION PARISH—Fred Stovall's Murray 1, 32-23-4e, rig up.

WEBSTER PARISH — S. H. Riggs, Tr.'s, L&A 1, 1-22-11, dry abn acct litigation, td 2100 ft. Sarepta Oil Co.'s Gardner 3, 6-22-10, dk. Ideal O&G Co.'s Coyle 1, 24-23-11, dk. J. P. Evans et al's Crichton 1, 31-18-8w, cor sandy lime 1648 ft. Service Drilling Co.'s Waller Est. 1, 21-23-11, rig up.

NORTHERN CALIFORNIA

Completion

PORTERVILLE—
Consolidated Properties, Ltd.'s No. 1, 35-22-27 1003

KERN COUNTY

BELRIDGE—General Pet.'s Berry 1, 30-28-21, new lcn. Richfield's Belridge 1, 20-27-20, dr shale 3550 ft. Rio Grande's Garcia 1, 18-28-22, co 3680 ft. K. C. Wallace's No. 1, 32-29-21, dr shale 3528 ft.

BUENA VISTA—Federal Drilling Co.'s No. 1, 20-31-24, sp.

BUTTONWILLOW — Nordon Oil Corp.'s Salisbury 1-A, dr hard sand 4758 ft.

COMANCHE POINT — W. W. Stabler's No. 1, 4-11-18, dr hard sand 1777 ft.

EDISON—Petroleum Securities Co.'s Johnson-Moss 1, 14-29-29, dr hard sand and streaks shale 2145 ft.

EL TEJON—J. J. Ritchie's No. 1, 33-11-19, dr shale 2155 ft.

McKITTRICK—Ohio's M. M. 1, 32-20-22, dr hard shale 7064 ft.

PATTIWAY—H. A. Bardeen's Ramsey 1, 10-10-23, dr granite 3550 ft, will test.

SEMITROPIC — Shell's Williams 1, 17-27-23, dr shale 5366 ft.

SHALE HILLS—Rio Cal Pet. Co.'s No. 1, 2-27-18, dr shale 1717 ft.

WEED PATCH—Shell's Porter-Day 1, 29-30-29, fsh for oil string, td 5029 ft; failed to flow on production test.

SANTA BARBARA COUNTY

CAMPBELL'S POINT — Bolsa Chica Oil Corp.'s Augur Permit 191-1, dr shale and hard limestone 1313 ft.

CASMALIA — Wildcat Oil & Royalty's Donovan 1, 20-10-35, dr 5212 ft.

EL TORO—Shell's Fithian 1, 18-4-25, flowed water on test, re-cemt 8⅝-in cas 2450 ft, td 4390 ft.

GATO Ridge—Barnsdall's Tegnazzini 1, 9-8-32, dr shale 2956 ft.

GOLETA—General Pet.'s More 3, dr shale 500 ft.

LOMPOC—Prairie's Shyvers 1, 11-7-35, dr gray sand 4775 ft.

LOS ALAMOS—N. S. Wilson's Midwest 1, 2-7-33, lcn.

NAPLES — J. H. Cochran 1, 7-4-29, dr shale 2112 ft.

ORELLA—General Pet.'s Erburu 7, plugging back from 1478 ft; Erburu 8, rigging up; Erburu 9, lcn; Erburu 10, lcn.

POINT CONCEPCION—Standard's Gerber 1, dr hard sand 5550 ft. Universal Consolidated's Concepcion 1, 30-5-34, dr gray sand 4140 ft.

PURISIMA — Vaqueros Major Oil Co.'s Union Annex 2, 6-7-33, sp.

SANTA MARIA — O. C. Field Gasoline Co.'s Norswing 1, 8-9-33, dr gray sand 4285 ft; Bradley 1, 8-9-33, pulling 4½-inch cas, td 5267 ft. Western Gulf's Bradley 1, 5-9-33, rigging up rotary.

VENTURA COUNTY

FILLMORE—General Pet.'s Burson 1, 6-3-19, dr shale 3077 ft.

HOPPER CANYON—Rio Grande's Lankershim 1, 13-4-19, dr shale 1828 ft.

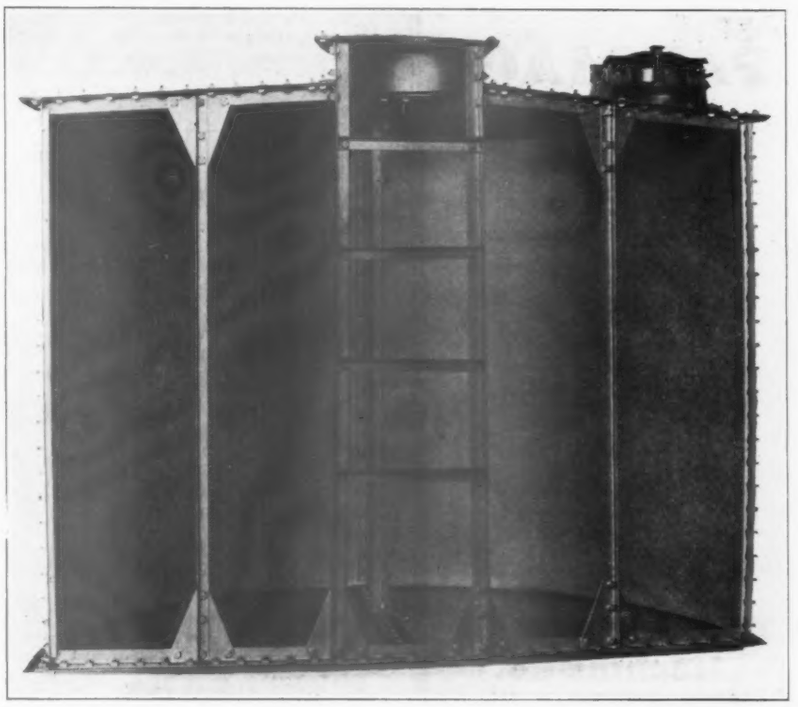
LOCKWOOD VALLEY—Lockwood Valley Oil Co.'s No. 1, 32-8-21, rig.

PIRU—Bolsa Chica Oil Corp.'s Snow 1-A, 4-4-18, co for production test, td 2497 ft, ran 6¼-inch cas to 2375 ft. A. N. Macrate's No. 1, 32-4-18, rig.

RINCON—Associated's Snowball 1, 19-4-24, sd 2080 ft.

SANTA MONICA MOUNTAINS—Olympic Corp.'s Calabasas 1, 18-1-17, 9-inch cas cmt 4540 ft, td 5670 ft.

SANTA PAULA—W. W. Bryant's Anlauf



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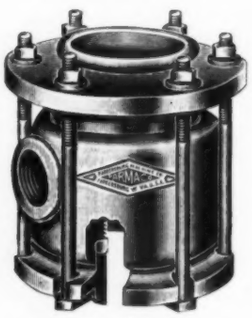

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3, 21-4-21, dr gray sand 1305 ft. George C. Thompson's No. 1, 15-4-21, dr shale 1566 ft.

SESPE—Superior's Kirtlan 1, 15-4-21, rigging up rotary.

SOMIS—Shell's Everett 1, dr shale 2828 ft.

VENTURA—Prairie's Sexton 1, 30-3-22, dr shale and hard sand 6935 ft.

MISCELLANEOUS

FRESNO COUNTY—Ohio's Welch-Brix 1, 8-21-15, dr shale 3303 ft. Associated's Mitchell 1, lcn. Richfield's Schrock 1, 33-22-16, showing gas and oil, dr hard sand 3075 ft.

KINGS COUNTY—Hornaday and Huggins' No. 1, 32-14-18, fsh 5050 ft. J. E. O'Donnell's No. 1, 7-23-20, plugging back to test showings, td 4310 ft.

SAN LUIS OBISPO COUNTY—F. J. Potter's No. 1, 8-28-12, lcn. Panorama Oil Co.'s Panorama 1, 7-31-21, sdtr 6¼-inch cas, td 4010 ft. Paso Robles Syn.'s Emerick 1, 34-27-11, fsh for tools, td 3910 ft. Latin-American Pet. Co.'s No. 1, 31-27-15, dr 4500 ft. Pismo Dome Oil Co.'s Pricco 2, 5-31-13, dr shale 2680 ft. Texas Pacific Coal & Oil's No. 1, 25-32-14, rigging rotary, td 4000 ft.

TULARE COUNTY—Ford Alexander's No. 1, 34-22-27, dr shale 700 ft. Colton Drilling Co.'s Henshaw 1, 34-22-27, rig. Larson Drilling Co.'s Best 1, 11-23-27, dr shale 300 ft. Paul M. Lewis' No. 1, 15-2-27, rig. Rayatt Oil Co.'s Henshaw 1, 34-22-17, rig. Terra Bella Drilling Co.'s Rusling 1, 34-22-27, making production test 925 ft. Terra Bella Oil Co.'s Gardiner 1, 35-22-27, pumping oil and water, td 918 ft. R. L. Turner's Fee 1, 34-22-27, dr shale 768 ft. Western Oil and Exploration's Gardiner 1, 35-22-27, running 10-inch liner, td 1020 ft.

YOLO COUNTY—George F. Getty's Guinda 1, 23-12-3, rigging up rotary.

SOUTHERN CALIFORNIA

CORONA—Western Gulf's Abacherli 1, new lcn.

COMPTON—Central Heights Oil Corp.'s Veach 1, will deepen from 5095 ft. Tenacity Oil Co.'s Del Amo 1, fsh for dr pipe, td 8500 ft.

EL MONTE—Los Gatos Oil Co.'s Sing 1, will deepen from 1895 ft.

FULLERTON—L. C. Simmel's Todd 1, dr gray sand 2605 ft. Standard's Bastanchury 1, dr hard shale 6450 ft.

MONETA—Ohio's Fish 1, dr shale and hard sand 7328 ft.

MONTEREY PARK—Celito Oil Co.'s Jepson 1, co 5275 ft.

NEWHALL — National Securities Co.'s Seeple 1, dr shale 1313 ft. Slauter and Bush's Trumbull 1, dr 300 ft. Southern California Drlg. Co.'s Needham 4, dr shale and oil sand 1578 ft.

PLAYA DEL REY—Cory, Randall and Clarke's No. 1, rigging rotary. Olympic Oil & Realty Co.'s No. 1, rigging rotary.

POMONA—Pomona Oil Ass'n.'s No. 1, dr hard sand and granite boulders 880 ft.

PUENTE—Arden Oil Co.'s Bidart-Rowland 1, dr gravel 315 ft. Bardeen Oil Co.'s Didier 1, dr shale and oil sand 3925 ft. Marcell Pet. Co.'s Marcell 1, coring 2707 ft. Rio Hondo Oil Co.'s Rowland 1, fsh for core barrel 2897 ft. Union's Sansinena 11, dr shale 4715 ft. Western Gulf's Diamond Bar 1, 28-2-9, sdtr drill pipe and core barrel, td 6590 ft.

ROSECRANS—Tri-State Oil Co.'s No. 1, will run string of cas, probably 10-in, td 4420 ft.

SAN FERNANDO—Shell's Andrews 1-1, 19-2-15, dr hard sand 4380 ft.

SANTA FE SPRINGS—L. S. Hartman's Campos 1, 31-2-11, dr gray sand 4246 ft Tureco Oil Co.'s Cole 1, 29-2-11, sd 5590 ft. Union's Orchardale Comm 1, 10-3-11, dr shale 3680 ft.

TORRANCE—California-Ventura Oil Co.'s Holston 1, 31-3-14, co to pump, td 3390 ft. Rio Grande's Watson 1, 17-4-13, dr shale 6313 ft.

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OKLAHOMA QUARTERLY PRODUCTION REPORT FOR SECOND QUARTER 1930

Following is a list of companies and individuals reporting to the Oklahoma Corporation Commission on Gross Production. This list gives those companies and individuals which reported production valued at more than $5,000. Royalty returns have purposely been omitted from the list to help avoid confusion. (†) Indicates values shown includes gas value also.

Name and Address—	Barrels	Amount
Atlas Drilling Company, Stroud	.....	19,806
Pete Adamson Jr., Tulsa	.....	6,970
American Refining Properties Company, Wichita Falls	4,149	5,773
American Oil & Refining Company, Oklahoma City	.....	21,601
American Oil Development Company, Pittsburgh	4,218	5,425
American Maracuba Company, N. Y. City	9,300	15,846
Argo Oil Company, Denver Colorado	31,222	45,839
Arkansas Fuel Oil Company, Shreveport, Louisiana	5,743	5,925
Alma Petroleum Company, Oklahoma City	998	1,198
Atlantic Oil Production Company, Dallas, Texas	217,150	277,133
S. W. Anthony, Mounds	.....	6,295
N. L. Amster, Ardmore	5,172	6,326
Anderson-Prichard Oil Co., Oklahoma City	46,658	25,375
Nettie H., Chas. and Wilmer Anderson, Los Angeles	4,701	4,097
Wm. H. Atkinson, by Prairie Oil and Gas	.....	23,691
Amerada Petroleum Corporation, Tulsa	936,708	1,297,037
Arthur Oil Co., Sistersville, W. Va.	9,387	11,841
Blackwell Oil & Gas, Cushing, Okla.	.....	378,788
Burke-Greis Oil Company, Tulsa	142,150	182,843
Bi-State Oil Company, Wichita Falls, Texas	5,269	6,427
J. G. Beard, S. I. Kolb, Duncan	4,419	6,311
Bryan Petroleum Company, Tulsa	11,156	16,317
Belbo Oil Corporation, Madill	22,290	30,204
British-American Oil Production Company, Tulsa	37,890	48,981
Babcock Brothers, Denison, Texas	9,817	14,836
Barbara Oil Company, Chicago	6,632	7,876
Bisett, Lytle and Gray, Tulsa	8,282	9,897
Bisett, Lytle and Gray, Account No. 2, Tulsa	5,971	6,773
Benedum-Trees Oil Company, Pittsburgh	69,284	90,749
Bridwell Oil Company, Wichita Falls	4,971	5,979
Burlingame Corporation, C. E., Bartlesville	4,031	5,632
Bay State Oil & Gas, Kansas City	12,113	16,655
Bell Oil & Gas, Tulsa	4,381	6,060
Berry Petroleum Company, Tulsa	7,590	9,531
Britton-Johnson Oil Company, Tulsa	5,347	5,376
Frank Buttram, Oklahoma City	.....	2,665
Burns, C. D. Preston	11,011	14,809
Bullock Oil Company, Oklahoma City	.....	98,805
George S. Bole, Tulsa	8,840	†12,618
Buell-Herndon & Company, Inc., Tulsa	22,587	34,933
Bank of America National Association Trustee, N. Y. City	.....	4,524
Braden & Moore, Tulsa	5,229	6,733
Baldwin & Suttan, Walters	18,788	23,820
Boettcher Oil & Gas, Ada	.....	7,042
O. U. Beck, Nocona, Texas	76,384	96,711
Anna M. Bradley, Tulsa	4,337	5,187
John Byrne, Tulsa	.....	5,153
Barnsdall Oil Company, Tulsa	636,280	847,178
E. M. Boring, Oklahoma City	11,260	14,147
Mabel Gray Breene, Tulsa	4,436	5,592
Frank M. Breene, trust estate, Tulsa	5,373	6,793

Name and Address—	Barrels	Amount
E. F. Briscoe, Oklahoma City	.....	3,926
Comar Oil Company, St. Louis	515,989	764,629
Carter Oil Company, Tulsa	2,688,807	3,502,497
Carter Oil Company, Tulsa	.....	5,955
Carter Oil Company, Tulsa, (suspense)	.....	47,582
Continental Oil Company, Ponca	566,229	797,097
Caddo Oil Company, Tulsa	4,110	4,860
Colonial Royalties Company, Tulsa	.....	3,920
Cortez Oil Company, Tulsa	3,626	5,640
Conservation Oil Company, Tulsa	5,996	7,488
Cromwell-Franklin Company, Oklahoma City	311,745	412,164
Central Valley Oil Company, Cleveland	.....	8,705
Central Commercial Oil Company, Tulsa	2,606	3,591
Central Petroleum Company, Tulsa	5,961	7,407
J. S. Cosden, Inc., Fort Worth	110,791	152,003
Cal-Cul Oil Company, Okmulgee	.....	3,158
Coline Oil Company, Oklahoma City	38,593	30,434
Coline Oil Company, Oklahoma City	920,628	1,270,608
J. E. Crosbie, Inc., Crosbie & Robinson, Inc., Tulsa	40,694	53,510
J. E. Crosbie, Inc., Tulsa	24,464	33,313
Crosbie, Davis and Sloan and Strum, Tulsa	1,501	2,015
H. D. Campbell, trustee, Raymondville	.....	5,992
John I. Cary, Okmulgee	.....	5,445
Crews Estate Oil & Gas, Enid	6,682	10.306
Edwin BO. Cox and Jake L. Hamon, Ardmore	.....	12,634
J. S. Canary, Tulsa	5,895	7,022
G. W. Connelly, Caney Kansas	.....	7,809
Champlin Refining Company, Enid	121,454	207,585
Commonwealth Trust, Pittsburgh	5,056	5,826
Creo Oil Company, Tulsa	9,011	10,372
Wm. Jones Cook, trustee, Muskogee	.....	37,672
Dixie Oil Company, Tulsa	126,565	175,598
Dixie Oil Company, Inc., Tulsa	459,908	†673,769
Dunmar Oil Company, Duncan	.....	19,512
John Droppleman, Wewoka	.....	25,883
Duncan Wichita Falls Pipe Line Company, Wichita Falls	13,473	18,094
Denver Producing & Refining Company, Oklahoma City	30,028	40,003
Darby Petroleum Corporation, Tulsa	.....	15,984
Darby-Lynde Company, Tulsa	56,158	76,663
Darby Petroleum Corporation, Tulsa	352,335	473,132
Devonian Oil Company, Tulsa	106,906	147,494
Deleware Consolidated Oil Company, Tulsa	44,652	49,951
Delmar Oil Company, Bartlesville	14,141	17,936
Deep Rock Oil Co., Tulsa	247,031	341,382
Deep Rock Oil Company, (suspense), Tulsa	.....	18,724
Deep Rock Oil Company, Tulsa	16,790	22,604
R. E. Downing, Inc., Tulsa	4,123	5,225
J. C. Doneghy, Tulsa	15,960	22,907
J. J. Deaner, Okmulgee	.....	11,296
Empire Oil & Refining Company, Bartlesville	420,327	540,429
Empire Oil & Refining Company, Bartlesville	.....	84,747

PRODUCTION AND VALUATION OF 10 LEADING OKLAHOMA PRODUCING COMPANIES FOR SECOND QUARTER, 1930

	Second Quarter 1930 Barrels	Second Quarter 1930 Value	First Quarter 1930 Barrels	First Quarter 1930 Value	Fourth Quarter 1929 Barrels	Fourth Quarter 1929 Value
Indian Territory Illuminating Co.	4,700,165	$6,290,945	3,541,918	$4,888,495	2,039,126	$3,230,567
Magnolia Petroleum Co.	3,370,314	4,295,257	3,247,894	4,036,289	3,409,271	4,899,783
Sinclair Oil & Gas Co.	3,324,222	4,513,274	3,329,390	4,771,612	3,665,089	5,792,708
Prairie Oil & Gas Co.	3,148,779	4,261,242	3,200,865	4,565,492	3,689,594	5,863,503
Carter Oil Co.	2,688,807	3,502,497	2,637,173	3,379,830	2,752,016	4,369,929
Gypsy Oil Co.	2,571,160	3,478,401	2,796,619	3,994,068	3,196,286	5,040,448
Mid-Continent Pet. Corporation	1,499,895	2,004,678	1,316,871	1,770,153	1,417,436	2,156,706
Pure Oil Co.	1,159,742	1,563,014	1,411,737	2,015,687	1,944,769	2,508,438
Shell Petroleum Corporation	1,143,104	1,527,933	1,810,903	2,640,154	1,903,812	3,004,739
The Texas Co.	1,124,703	1,478,722	1,090,191	1,508,526	.....	.....
Total	24,730,891	$32,915,963	24,383,561	$33,570,306	24,017,399	$36,866,821
Total all companies (A. P. I. Estimates)	60,219,300	.....	58,134,350	.....	60,151,200	.....

Name and Address—	Barrels	Amount
Empire Oil & Refining Company, (suspense)	.....	80,460
Eason Oil Company, Enid	170,[illegible]	255,626
Earlsboro Production Trust No. 1, Tulsa	29,590	41,663
Ellis Drilling Company, Wichita Falls	5,375	6,995
Elliott & Vensel, Tulsa	5,784	6,284
Lewis Emery Jr. & Sons, Bradford Pa.	4,200	5,602
Eagle Picher Mining Company, Henryetta	2,354	3,330
A. J. Erlewine, et al, Wilson	5,892	7,020
Wirt Franklin, Ardmore	323,222	429,358
Wirt Franklin, Ardmore	999,458	1,279,482
Wirt Franklin, Ardmore	.....	4,723
Wirt Franklin, Ardmore	11,660	14,231
Wirt Franklin, by Liberty National Bank	3,517	4,072
Wirt Franklin & Mary C. Cates, by Liberty National Bank	.....	2,134
H. B. Fell Receiver for United 8 Oil Trust, Ardmore	4,918	6,768
Fort Ring Oil & Gas, Ft. Worth	4,381	5,694
Flynn Oil Company, Oklahoma	.....	4,548
Fern Oil & Gas, Yale	7,237	9,514
D. W. Franchot & Company, Tulsa	29,721	37,671
Foster & Davis, Inc., Bartlesville	8,108	10,001
Foster Oil Company, Tulsa	5,156	6,818
J. W. Fields; P. S. Potts, John Zike and John Neely, Tulsa	4,116	5,154
J. S. Franks, trustee, Oklahoma City	21,534	37,316
Fleming & Kimbell, Sherman	9,591	13,653
Finance Oil Company, Towanda, N. Y.	11,830	14,664
F. A. Gillespie & Sons, Tulsa	15,443	17,228
Gates Oil Company, Ardmore	9,253	10,360
Gilcrease Oil Company, Tulsa	32,694	33,370
Gibson-Zahniser Oil Corporation, Tulsa	4,928	†7,790
Gardner Petroleum Company, Tulsa	8,314	11,994
Glidden Oil Corporation, Tulsa	4,070	5,378
Guaranty Trust Company of N. Y. City	.....	11,959
Gled Oil Company, Tulsa	12,704	17,034
John B. Grieves, Terlton	7,144	9,288
Galt-Brown Company, Ardmore	16,215	21,359
Edw. Galt, Ardmore	1,688	2,910
H. B. Gettner, Tulsa	.....	27,268
James H. Graham, Tulsa	4,708	6,369
R. W. Getzendoner, Waxahachie	4,832	5,677
Goddard Company, Ardmore	6,869	8,923
J. Wood Glass, Nowata	785	1,139
Gilmer Oil Company, Ardmore	33,212	39,447
Gypsy Oil Company, Tulsa	2,571,160	3,478,401
Gypsy Oil Company for Partners, Tulsa	10,080	12,682
Gypsy Oil Company, (suspense), Tulsa	.....	138,843
Gypsy Oil Company, (suspense), Tulsa	.....	134,605
Gypsy Oil Company, (suspense), Tulsa	.....	4,246
Gypsy Oil Company, (suspense), Tulsa	.....	1,091
Grimes & Gillespie, Tulsa	10,879	14,465
Glass & Harmon, Nowata	9,500	11,849
Glidden Oil Company, Tulsa	.....	9,531
Harland Oil Company, Walco	15,036	16,615
Hay & McClure, Inc., Peoria, Ill.	1,350	19,359
Hall & Briscoe Inc., Oklahoma City	32,281	44,247
Houston Oil Company of Texas, Houston	49,961	67,535
Henderson Oil Company, Marietta, Ohio	8,150	9,599
Highway Oil Refining Corporation, Tulsa	36,377	48,176
Home Gas Company of Cushing, Cushing	16,129	31,741
Hickman & Heydrick, Wichita Falls	4,318	5,582
H. G. Hendricks, attorney, Bristow	6,498	7,098
W. T. Hales, Oklahoma City	42,551	50,387
W. T. Hales, Oklahoma City	3,251	4,185
Frank Haskell, agent, Tulsa	9,435	11,059
J. H. Hudson, Ardmore	.....	32,833
C. C. Harmon, Nowata	8,913	11,331
Harmon & Reed, Nowata	5,066	6,325
Elizabeth Crockett Hayes, Oklahoma City	.....	46,447
S. W. Hayes, Oklahoma City	.....	43,925
T. J. Hughes, Cushing	.....	7,551
G. D. Horton, agent, Hawarden, Iowa	.....	3,275
Harris & Haun Inc., Blackwell	.....	15,116
Harris-Hayes Company, Okmulgee	8,114	10,627
J. A. Hull, Tulsa	29,730	41,843
J. W. Henry, Tulsa	3,429	†5,261
Investors Royalty Company, Inc., Tulsa	55,364	74,273
Iron Mountain Oil Company, Tulsa	21,398	†28,470
Indiana Oil & Gas Company, Tulsa	23,751	29,776
R. A. Irwin, Tulsa	.....	6,932
A. B. L. F. Ice and Ice Drilling Company, Tulsa	6,089	7,330
Imo Oil & Gas, Covington	.....	8,811
Indian Territory Illuminating Company, Bartlesville	4,700,165	6,290,945
Indian Territory Illuminating Company, Bartlesville	118,437	155,877
Indian Territory Illuminating Company, (suspense) Bartlesville	.....	123,728
R. C. Jennings, Pittsburgh	4,574	7,069
Leo Jacobs, St. Louis	7,579	9,335
Johnson Oil Refining Company, Chicago	14,490	21,226
Roy M. Johnson, Ardmore	.....	8,133
R. C. Jones & Company Inc., Cushing	.....	14,385
Kreola-Colcord and Commerce, Ardmore	9,292	10,899
Kreola Oil Company, Ardmore	9,334	5,734
Kingwood Oil Company, Okmulgee	35,539	49,355
Kay Oil Company, Blackwell	16,505	23,910
Kay & Kiowa Oil Company, Tulsa	5,391	7,213
Keener Oil & Gas Company, Tulsa	37,368	44,172
Kewanee Oil & Gas, Titusville Pa.	187,646	266,372
K. D. & H. Oil Company, Ada	2,386	2,484

Name and Address—	Barrels	Amount
Chas. E. Knox, Enid	31,747	†43,815
Chas. E. Knox Oil Company, Enid	.....	1,160
C. D. Klingensmith, Sapulpa	.....	5,446
Kanola Corporation, Tulsa	.....	22,050
Keystone Production Company, Fort Worth	.....	7,013
Laurel Oil & Gas, Philadelphia	35,335	45,604
Louisiana Oil Refining Corporation, Shreveport	81,355	†88,787
Lima Oil Company, Bartlesville	2,066	2,341
Little Nich Oil Company, Chickasha	.....	9,976
Link Oil Company, Tulsa	17,374	†22,750
D. B. Lack, Oklahoma City	.....	5,221
A. M. Landon, Independence, Kansas	5,863	7,465
LeFlore County Gas & Electric Company, Poteau	.....	5,730
Lesh & McCall et al, Nocona	8,425	6,627
Lilami Oil Corporation, Oklahoma City	.....	5,045
C. H. Lebow, Tulsa	4,639	6,801
Lone Star Gas Company, Dallas	5,199	4,978
C. L. McMahan, Independence Kansas	3,464	4,808
C. L. McMahan Inc. & C. L. McMahan, Tulsa	49,352	68,448
McMan Oil Company, Tulsa	91,427	129,973
McCulloch Oil Company, Tulsa	65,308	88,870
H. W. McGill, admr., Ardmore	.....	6,023
I. R. McQueen, Oklahoma City	5,916	8,243
W. C. McBride, Inc, St. Louis	808	1,030
McGraw Oil Company, Tulsa	16,190	20,285
McGinley-Sigler Company, Fort Worth	9,159	7,210
Magnolia Petroleum Corporation, Dallas	3,370	4,295,257
Magnolia Petroleum Corporation, Dallas, (suspense)	.....	23,741
Magnolia Petroleum Corporation, Pair for others, Dallas	.....	23,304
Magnolia Petroleum Corporation, Protest, Dallas	.....	60,073
Margay Oil Corporation, Tulsa	55,637	75,352
Mul-Berry Oil Company, Cushing	.....	165,453
Mid-Continent Petroleum Corporation, Tulsa	1,499,895	2,004,678
Mid Kansas Oil & Gas, Findlay, Ohio	381,761	496,712
Madden & Madden, Lexington, Kentucky	13,693	18,892
Mudge Oil Company, Pittsburgh, Pa.	19,140	14,652
Mullendore Trust Company, Cleveland	.....	22,929
Minnehoma Oil & Gas, Tulsa	149,858	210,040
Midco Oil Corporation, Tulsa	21,582	29,291
Marileen Oil & Gas, Blackwell	5,322	†7,628
J. H. Markham, Jr., Tulsa	18,377	23,728
Frank Meadors, Jr., Wetumka	3,555	4,839
Ward S. Merrick, Ardmore	.....	7,467
Junia E. Montgomery, Hickman, Nebraska	.....	8,628
D. B. Mason, Tulsa	18,643	21,180
Murphy Oil Company of Pennsylvania, Philadelphia	8,218	8,973
Dudley D. Morgan, Tulsa	.....	5,630
F. W. Merrick, Inc., Ardmore	.....	61,498
Maud Oil & Gas, paid by Prairie Oil & Gas	6,500	9,180
Malernee Oil Company, Oklahoma City	4,592	6,284
National Oil & Development Company, Tulsa	9,366	10,874
National Refining Company, Cleveland, Ohio	13,119	18,896
National Union Oil & Gas Company, Blackwell	5,089	7,214
New England Pipe Line Company, Boston, Mass.	5,081	6,767
Norbla Oil Company, Tulsa	6,310	8,473
Norwood Oil Company, Tulsa	7,360	8,779
Nowata Oil & Refining Company, Tulsa	.....	6,080
Nowata Oil & Gas Company, Tulsa	.....	6,733
Lillie Korns Newman, Coffeyville, Kansas	2,117	2,498
W. C. Norris, Tulsa	.....	9,118
Noble-Olson Drilling Company, Tulsa	26,733	33,869
O'Rourke Oil Company, Bristow	6,498	7,098
Ona Oil Company, Blackwell	.....	23,880
Osage Gas Prod. Company, Independence, Kansas	454	549
Ohio-Osage Oil Company, Tulsa	4,713	7,105
Ohio Fuel Supply Company, Columbus, Ohio	14,661	19,058
Oklahoma Public Service Corporation, Cedar Rapids, Iowa	5,721	8,094
Oklahoma Company, Tulsa	10,430	†19,414
Oklahoma Natural Gas Corporation (suspense)	.....	1,746
Olean Petroleum Corporation, Bristow	.....	2,108
O. O. Owens, Tulsa	7,730	10,471
A. G. Oliphant, Tulsa	7,109	7,019
Oklahoma Natural Gas Company, Tulsa	.....	17,138
Prairie Oil & Gas, for H. T. Worley	.....	10,312
Prairie Oil & Gas, for Jos. Zacherle	.....	27,075
Prairie Oil & Gas Company, Independence, Kansas	3,148,779	4,261,242
Prairie Oil & Gas Company, for others	.....	17,766
Prairie Oil & Gas Company for Wm. H. Atkinson	.....	23,691
Prairie Oil & Gas Company for E. N. Brockman	.....	5,446
Prairie Oil & Gas Company for Glidden Oil Co.	.....	9,531
The Petroleum Company, Tulsa	10,646	13,422
The Petroleum Company, Tulsa	4,134	5,433
Producers Oil Company, Tulsa	15,131	20,082
Producers & Refiners Corporation, Independence, Kansas	298,749	348,202
R. H. Pierce & Company, Inc., Tulsa	.....	4,969
Pierce Petroleum Corporation, Sand Springs	23,572	31,442
Paraffine Oil Company, Houston, Texas	7,637	8,764
Penn. Ohio Gas Company, Pittsburgh	11,989	15,380
Phillips Oil Company, Chelsea	4,216	5,169
Phillips Petroleum Company, Bartlesville	493,719	650,044
Plymouth Petroleum Company, Tulsa	7,783	9,714
Pawnee Oil Production Company, Tulsa	3,902	5,235
Peerless Oil Production Company, Tulsa	5,294	8,173

Name and Address—	Barrels	Amount
Plains Petroleum Company, Inc., Tulsa	6,697	8,904
Pure Oil Company, Chicago	1,159,742	1,563,014
Perkins and Cullum, Wichita Falls, Texas	12,517	15,222
Pandem Oil Company, Wichita Falls, Texas	3,669	5,342
Paragon Oil Company, Tulsa	4,325	5,407
Privett Drilling Company, Maramec	2,344	3,050
Papoose Oil Company, Tulsa	90,419	†129,248
Pouder Pomeroy Company, Tulsa	61,090	92,748
W. B. Pine, Okmulgee	10,325	14,532
W. B. Pine and Phillips Petroleum, Okmulgee	2,096	2,808
W. B. Pine, Okmulgee	81,027	105,074
Pioneer Petroleum Company, Tulsa	10,861	12,694
Phoenix Oil Company, Pittsburgh	.....	7,156
Pyramid Oil Company, Winchester, Kentucky	5,504	6,377
W. G. Phillips and J. B. Milam, Chelsea	44,006	53,574
Ryan Consolidated Petroleum Corporation, Tulsa	5,382	7,291
Frank H. and Isabella Reed, Neosho, Missouri	46,781	62,846
Red Bank Oil Company, Tulsa	57,385	73,273
Regal Oil & Gas Company, Tulsa	24,624	42,941
Reiter-Foster Oil Company, Tulsa	44,386	60,839
Reserve Petroleum Company, Tulsa	16,395	20,968
Riverland Company, Tulsa	7,944	11,571
Reliance Oil Company (Houston), Houston, Texas	4,582	5,227
Reliance Oil Company of Oklahoma, Houston, Texas	4,448	5,349
Ramsey Petroleum Corporation, Oklahoma City	101,884	108,958
D. A. Richardson, Oklahoma City	6,763	9,145
C. T. Roth, Independence, Kansas	4,291	5,539
J. W. Robins, Fort Worth, Texas	6,361	6,429
U. T. Rexroat, Gdn., Ardmore	.....	4,087
B. H. Rowlett, Shawnee	.....	3,166
Thos. C. Roberts, Princeton, New Jersey	.....	6,007
Rockland Oil Company, Ardmore	22,723	24,190
Rex Oil & Gas, Winchester, Kentucky	5,504	6,377
Jake Rutz Oil Company, Morris	.....	8,600
Ryan Consolidated Petroleum Corporation, Tulsa	5,382	7,291
Shell Petroleum Corporation, St. Louis, Missouri	1,143,104	1,527,933
Shell Petroleum Corporation (for partners), St. Louis, Missouri	2,716	3,221
Shell Petroleum Corporation (suspense), St. Louis	.....	7,332
Snowden & McSweeney Company, New York	.....	31,547
Sturm Drilling Company, Ardmore	12,416	15,517
C. B. Shaffer, Chicago	18,795	21,744
J. C. Shaffer, Inc., Oklahoma City	26,058	35,847
Sure Oil Corporation, Tulsa	4,342	5,591
Savoy Oil Company, Tulsa	6,968	†7,862
Shasta Oil Company, Wichita Falls, Texas	172,030	208,675
S. W. Gas Utilities Corporation, Ada	.....	7,521
Silurian Oil Company, St. Louis, Missouri	120,044	149,172
Sands Petroleum Corporation, Tulsa	8,260	11,440
Simms Oil Company, Dallas, Texas	91,515	126,006
Slab Oil Company, Ardmore	8,732	14,194
Signal Oil Company, Tulsa	45,558	58,673
Skelly Oil Company, Tulsa	905,512	1,184,825
Selby Oil & Gas, Tulsa	26,312	30,512
T. B. Slick, Oklahoma City	562,924	755,163
Shoreline Oil & Gas, Tulsa	29,184	40,208
Sinclair Oil & Gas Company, Tulsa	3,324,222	4,513,274
Sinclair Crude (suspense), Tulsa	.....	173,264
Sinclair Oil Company for royalty owners	3,352	4,686
Simpson-Fell Oil Company, Ardmore	20,628	†23,771
Phil N. Stuart, Shawnee	.....	2,424
Skelton-Moore Oil Company, Bartlesville	4,851	6,013
Sampson Oil Company, Tulsa	3,953	†5,242
Sterling Oil & Gas, Tulsa	4,940	5,970
Schermerhorn-Ardmore Company, Minneapolis, Minnesota	77,010	.....
J. B. Schermerhorn, Inc., Minneapolis, Minnesota	59,570	72,256
Schermerhorn-Young Company, Ardmore	980	1,632
Schermerhorn Oil Company, Minneapolis, Minn.	.....	8,028
Chas. R. Smith, Jr., Ardmore	4,463	5,787
Marie S. Smith, Ardmore	6,085	7,127
James A. Swindler, Muskogee	4,068	5,388
J. L. Selby, Muskogee	6,670	.....
R. H. Sultan, Walters	30,914	40,623
George W. Snedden, Tulsa	27,638	42,198
M. B. Shifflin, Coffeyville, Kansas	7,572	9,843
Robert C. Sharp, Tulsa	4,031	5,632
E. Snell, Jr., Dustin	.....	5,824
Edmon R. and Willis Spigner, Latimer	.....	5,574
C. P. Shertzer, Dewey	5,323	5,952
Will H. Smith, Ardmore	3,667	4,127
Sunray Oil Company, Tulsa	45,236	†85,290
J. L. Selby, Muskogee	.....	8,361
Harry Stekoll, Tulsa	12,150	16,245
Sheridan Oil Company, Tulsa	13,722	16,298
Tidal Oil Company, Tulsa	438,374	552,001
Tidal Oil Company for Cherokee-Warren Oil and Gas	8,016	9,159
Texas Company, Oklahoma City	1,124,703	1,478,722
Texas Company for Partners	3,314	5,255
Twin State Oil Company, Tulsa	517,272	437,229
Treveyn Oil Company, Duncan	5,731	8,787
Templeman Oil Corporation, New York	7,178	9,521
Thlocco Oil Company, Tulsa	8,749	12,100
Transcontinental Oil Company, Tulsa	93,038	116,732
Tulsa Oil Company, Tulsa	.....	7,999
Turman Oil Company, Tulsa	147,165	203,709
Texas Pacific Coal & Oil Company, Thurber, Texas	48,857	†42,497
Union Oil & Mining Company, Tulsa	4,362	5,604
Gillia Umburn, Weleetka	.....	5,472
United Eight Oil Trust, Ardmore	4,918	6,768
Vernon Oil and Gas, Blackwell	.....	8,602
Vacuum Oil Company, Houston, Texas	114,381	†175,934
Venmex Oil Company, Wichita Falls, Texas	87,133	99,541
Viersen Oil and Gas, Okmulgee	9,224	13,072
Valley Osage Oil Company, Tulsa	17,876	22,020
Howard J. Whitehill and H. C. Weible, Tulsa	11,990	14,709
Howard J. Whitehill, Tulsa	3,518	4,223
Whitehill Oil Corporation, Tulsa	17,028	20,773
Winona Oil Company of Delaware, Tulsa	14,159	†17,129
Winona Oil Company of Delaware, Tulsa	24,638	†33,844
L. H. Wentz Oil Dev., Ponca City	157,980	236,626
Walsh Oil Company, Tulsa	5,680	6,834
Warner-Caldwell Oil Company, Titusville, Pennsylvania	27,041	32,320
Watchorn Oil and Gas, Oklahoma City	9,466	13,498
Westerly Oil Company, Bartlesville	4,381	5,901
Wellsville Oil Company, Wellsville, New York	10,745	13,048
Wolverine Petroleum Company, St. Louis, Missouri	164,851	200,852
Westland Oil Company, Tulsa	24,988	33,113
Wiser Oil Company, Sistersville, West Virginia	95,093	113,104
Westheimer and Daube, Ardmore	112,538	135,194
Wood Oil Company, Tulsa	.....	14,126
H. T. Worley, paid by Prairie O.&G. Co.	.....	10,312
J. H. Wright, estate, Sapulpa	18,726	24,706
J. E. Wallace, Okmulgee	.....	11,248
Winkler and McQueen, Inc., Duncan	.....	9,644
Margaret S. Weeks, Ardmore	4,962	5,787
Wise & Jackson, Sapulpa	18,404	22,036
Wood, Gilbert and Wood No. 1, Oklahoma City	.....	8,132
H. F. Wilcox Oil and Gas, Tulsa	215,023	†285,395
Walter Wagoner, Shidler	.....	32,565
L. W. Zimmerman, Chicago	28,093	28,837

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Texas Quarterly Production Report
Second Quarter, 1930

Leading Producing Companies of Texas, Second Quarter, 1930

	Second Quarter 1930	First Quarter 1930	Fourth Quarter 1929	Third Quarter 1929	Second Quarter 1929	First Quarter 1929
Humble Oil & Refining Co.	7,622,276	7,359,231	7,647,340	7,775,323	6,323,670	4,496,154
Gulf Production Co.	7,345,267	6,852,880	7,384,799	8,082,210	7,594,007	7,173,134
Mid-Kansas Oil & Gas Co.	4,851,448	2,831,354	.....	.....	.....	.....
The Texas Co.	4,361,235	4,304,651	4,883,816	4,906,652	4,047,495	3,606,194
Shell Petroleum Corporation	4,166,995	2,137,007	2,501,841	2,998,937	3,345,651	3,555,869
Magnolia Petroleum Co.	3,137,380	2,851,905	2,340,306	2,490,996	2,568,770	2,726,878
Phillips Petroleum Co.	2,533,680	2,097,349	.....	.....	.....	.....
Southern Crude Oil Purch. Co.	2,450,790	2,842,112	3,178,536	4,124,464	3,811,091	3,984,993
Transcontinental Oil Co.	2,399,073	2,824,574	2,942,594	2,775,853	2,068,706	1,762,573
Pure Oil Co.	2,000,960	1,191,645	.....	.....	.....	.....

Total of 10 leading producing companies in Texas for second quarter, 1930 ..... 40,869,104 barrels
Evaluation of same $39,741,834
Total production of all Texas producing companies for same period ..... 73,555,005 barrels
Evaluation of same $75,531,293

GROSS RECEIPTS REPORTED FROM CRUDE OIL PRODUCTION FOR THE QUARTER ENDING JUNE 30, 1930

Name—Address—	Barrels	Value
Ama-Gray Oil Company, Amarillo	3,117	4,226
Alamo Oil Company, Brownwood	425	539
Ada Belle Oil Company, Batson	21,319	24,452
Allday Oil Corporation, Wichita Falls	437	369
Adamson, Peter, Jr., Tulsa, Oklahoma	429	491
Argus Oil Company, Inc., Brownwood	332	310
Acorn Oil Company, Beaumont	8,394	9,577
Ascot Company (3-31-30), Wichita Falls	7,301	10,089
Anderson, C. N., Tr., Des Moines, Iowa	717	1,053
Arnold, J. L., et al, Eastland	724	834
Arab Gasoline Corporation, Eastland	1,432	1,900
Arkansas Fuel Oil Company, Shreveport, Louisiana	125,277	172,398
Arrow Head Oil Company, Dallas	1,432	1,911
Atlas Oil Corporation, Humble	1,801	2,071
Atlas Production Company, Burkburnett	1,306	1,556
Adams & Lyles, Lockhart	3,401	3,911
Adams & Lyles, Lockhart	2,153	2,853
Adams & McGahey, Amarillo	4,737	6,207
Allbritain, F. J., Markley	847	1,153
Ames, E. W., et al, San Antonio	130	177
Anchor Oil Producing Company, Dallas	679	887
Arcadia Refining Company, Brownwood	21,608	29,138
Abercrombit, J. S., Company, Houston	65,556	73,746
Alaska Petroleum Company, Amarillo	1,324	1,488
Alamosa Oil Company, Amarillo	6,143	4,929
Alworth-Stevens-Hild Company, New York, N. Y.	1,474	1,253
Abraham, Earl, Bridgetown	1,102	1,537
Amicable Life Insurance Company, Waco	415	415
Ashe Syndicate, Fort Worth	1,004	1,372
A. & P. Production Company, Houston	43,472	46,961
Anderson, C. N., Tr., Des Moines, Iowa	1,168	1,607
Amarillo Oil Company, Amarillo	1,712	1,591
Arco Oil Company, Wichita Falls	40,927	38,394
Anderson, J. T., Cisco	2,459	3,346
Abbott, R. W., Beaumont	890	1,023
Art & Taxman, Wichita Falls	2,456	3,477
Adams, Dr. Walter B., Wichita Falls	387	530
American Refining Properties (WMP), Wichita Falls	9,855	12,449
Atlantic Keystone Petroleum Company, Bolivian Petroleum Company, Fort Worth	469	398
American Refining Properties (MJB), Wichita Falls	2,975	4,058
American Refining Properties (RMW), Wichita Falls	1,847	2,551
American Refining Properties (NBC), Wichita Falls	1,232	1,700
Atlantic Oil Producing Company, Dallas	873,446	930,693
Andrews Petroleum Corporation, New York	4,138	3,635
Atkinson & Sandefer Oil Corporation, Breckenridge	8,488	10,851
Adams, McGahey & Osborne, Amarillo	4,737	5,923
Adams & Prince, Amarillo	14,437	17,902
Amerada Petroleum Corporation, Tulsa, Oklahoma	352,063	322,683
American Refining Properties, Wichita Falls	55,721	59,935
American Maracaibo Company, New York	105,688	90,380
Ascot Company, Wichita Falls	4,564	6,303
Aarco Oil & Gas Company, Baltimore, Maryland	8,269	11,633
Artex Oil Company, Wichita Falls	1,063	1,439
Ailes, J. W., Wichita Falls	922	1,118
Andrews, W. R., et al, Breckenridge	1,104	1,428
Anderson Pritchard Oil Corporation, Oklahoma City	163	207
Brown Farm Oil Company, Wichita Falls	1,964	2,860
Brownlee-Pope Oil Company, Austin	2,045	2,662
Bayless, A. A., Fort Worth	1,071	1,559
Barkley & Meadows, Fort Worth	2,253	1,021
Bradstreet, The L. G., Company, Fort Worth	56,848	76,780
Blue Bonnet Petroleum Corporation, San Antonio	707	772
Baker, James Blair, Jr., and C. F. Camp, T. Wichita Falls	3,183	4,081
Baker, James Blair, Jr., and C. F. Camp, Tr., Wichita Falls	24,705	31,558
Bourbon Royalty Company, Dallas	1,269	1,749
Bourbon Royalty Company, Dallas	4,460	5,166
Borecalis Oil Company, Oklahoma City	3,983	5,355
Burns, L. T., Wichita Falls	119,721	169,562
Bona, Joseph E., Coleman	8,277	8,930
Bluebonnet Oil Company, Wichita Falls	758	1,040
Brown, Dr. E. W., Estate, Orange	601	692
Brown, Mrs. Carrie L., et al, Orange	16,687	18,926
Barnsley, Foster, Laredo	14,631	13,427
Boysen, B. S. and Jack Smith, Brownwood	808	922
Big Gray Oil & Gas Company, Amarillo	29,858	40,653
Big Lake Oil Company, Pittsburgh	987,150	1,203,664
Bowers Oil Company, Vernon	1,184	1,554
Brady Brothers, Minerva	1,013	1,317
Brannon & Murray, Cisco	2,919	4,310
Bruce, A. D., Brownwood	255	307
Burke-Greis Oil Company, Tulsa	1,456	2,062
Bailey, Carl, Wichita Falls	8,425	11,673
Badger Oil Company, Amarillo	12,424	15,990
Barnsley, Foster, Laredo	12,813	10,892
Bevering, A. H., et al, Henrietta	957	1,242
Buell & Hagan, San Angelo	659	500
Bartlett Production Company, Rockdale	779	1,007
Bowman Oil Company, Rockdale	553	717
Biggs Oil & Gas Company, McKinney	970	1,362
Byrd, W. E., Daisetta	1,176	1,183
Braden Company, Tulsa	3,956	5,102
Bohner, C. J., et al, Burkburnett	5,737	8,030
Bohner, Crenshaw & Whitehill, Burkburnett	7,922	10,347
Bohner, C. J., Oil Corporation, Burkburnett	17,987	23,627
Brown, A. J., Fort Worth	1,322	1,554
Bynum & Palmer, Rockdale	123	166
Bonner, The, Company, Wichita Falls	18,858	25,840
Barnsdall Oil Company, Tulsa	84,408	102,892
Brown, H. L., Fort Worth	8,718	10,279

Name—Address—	Barrels	Value
Bridwell & Heydrick, Tr., Wichita Falls	1,709	2,449
Bartlett, Wm., & Company and Texota Petroleum Company, Electra	409	567
Britton & Gordon, Strawn	570	815
Bynum, W. W., Estate, Rockdale	878	1,143
Bryson Oil & Gas Company, San Angelo	16,281	23,668
Burton McKee Oil Corporation, Strawn	608	805
Butler & Perkins, Olney	151	179
Black Creek Oil Company, Olney	395	533
Beggs, Geo., Strip, Fort Worth	1,969	3,220
Bernardini, P., et al, Brownwood	35	30
Barbara Oil Company, Chicago	3,131	4,696
Baldwin, F. C., et al, Fort Worth	1,479	2,138
Beams, Drew, Okmulgee, Oklahoma	1,573	2,088
British American Oil Producing Company, Tulsa	5,705	7,993
British American Oil & Gas Company, Tulsa	796	1,027
Breeding & Hutson, Rising Star	445	676
Barnes, J. B., Electra	12,283	15,365
Baker & Pardue, Breckenridge	13,221	17,839
Bexata Oil Company, San Antonio	1,226	1,362
Boller, C. W., Wichita Falls	33,819	48,048
Boller, C. W., Wichita Falls	5,229	6,408
Black Diamond Oil Company, Amarillo	344	333
Bridwell Oil Company, Wichita Falls	164,125	198,450
Baker, J. F. and H. E., Breckenridge	2,387	3,222
Baker, Mollie B., and Fred R., Breckenridge	835	1,160
Baker, J. A., and Mollie B., Breckenridge	6,505	8,781
Buchanan, A. A., San Antonio	19,262	26,161
Bohner, C. F., Kansas City, Kansas	145	177
Baird Oil Company (3-31-30), Putnam	148	207
Baird Oil Company, Putnam	149	176
Buttram Petroleum Corporation, Oklahoma City	38,469	57,642
Buttram, Frank, Oklahoma City	774	1,044
Bridwell & Mayfield, Wichita Falls	5,308	8,645
Bell Oil & Gas Company, Tulsa	9,612	7,314
Biles, George J., Tulsa	4,891	5,736
Bullington-Clark, et al, Wichita Falls	5,564	4,981
Black, W. A., Midland	922	1,032
Black Cat Oil Company, Electra	862	1,162
Boardman & Ulrich, Corsicana	1,281	1,665
Brooks & Hanlon, Inc., Tulsa	718	862
Brown & Guinn, Wichita Falls	289	406
Bashara, M. J., & Sons, Wichita Falls	4,566	4,348
Bashara, J. F., Houston	8,871	10,112
Bolin, D. H., Tr., Graham	16,961	21,711
Brazelton Brothers and Williams, Jean	4,592	6,030
Burkburnett Production Oil Trust, Baltimore, Md.	941	1,269
Benedum-Trees Oil Company, Pittsburgh	26,077	21,349
Big Gray Oil Company, Pampa	25,960	36,172
Bailey, Mrs. Fannie E., Wichita Falls	1,302	1,799
Barnum Oil Company (1-1927 to 4-30-30, inc.), Amarillo	.....	1,023
Big State Oil Corporation, Houston	2,615	3,394
Brownwood Producing & Refining Co., Brownwood	1,498	1,978
Bass & Dillard, Wichita Falls	2,350	3,247
Biel, Wm. A., Von Ormy	16	18
Barkley & Conway, Ranger	5,623	8,557
Brown & Lickey, Wichita Falls	706	996
Brown, A. J., (7-1-28 to 3-31-29, inc). Fort Worth	7,246	8,792
Cushing Refining & Gasoline Company, Cushing, Oklahoma	9,232	7,824
Cardinal Oil Company, San Angelo	55,273	27,656
Caruthers Company, San Antonio	1,231	1,305
Clarkson, William, Jr., Houston	4,673	6,318
Corpus Christi Oil Company, Corpus Christi	427	320
Cable-Development Company, Amarillo	590	590
Camp Oil & Gas Company, The, Wichita Falls	639	846
Church & Weekley, Fort Worth	72,915	61,584
Cable Oil Company, Wichita Falls	3,650	4,967
Central Texas Refining Company, Corsicana	13,090	17,044
Culbertson Company, Wichita Falls	8,149	11,573
Carson, Usher, Laredo	798	678
Craig & Lowrie, Pittsburgh	1,336	1,417
Crabb & McNeel, San Angelo	4,408	5,422
Currie Oil Corporation, Washington, D. C.	321	424
Canary, S. C., et al, Tulsa	310	428
Carey, C. W., Wichita Falls	6,440	8,572
Charter Oil Company, Brownwood	7,061	10,027
Clark, R. R., Wichita Falls	12,746	17,890
Clark, R. R., et al, Bickley Farm, Wichita Falls	5,590	8,138
Cockrell-McIlroy Oil Company, Amarillo	32,524	37,941
Connell-Wixson-Frazier, El Dorado, Kansas	1,139	1,287
Consolidated Oil Company of Texas, Wichita Falls	139,267	182,177
Cosa Oil Company, San Antonio	326	479
Currie Oil Corporation, Washington, D. C.	376	537
Christie Brothers, Wichita Falls	76,086	106,045
Crown Oil & Refining Company, Houston	16,802	19,224
Crown Central Petroleum Corporation, Houston	43,610	36,665
Cranfill-Reynolds Company, Houston	539,602	590,362
Continental Oil Company, Ponca City, Oklahoma	1,922,285	1,893,909
Coppock & Coleman, Iowa Park	18,621	26,756
Cullen, H. R., et al, Houston	8,178	8,577
Cullen and West Production Company, Houston	9,908	13,486
Comet Petroleum Company, Fort Worth	2,991	2,382
Central Oil Company, Cameron	3,810	4,847
Chenault, W. L., Amarillo	563	783
Cromwell, Carl G., San Angelo	8,257	5,822
Clear Lake Oil Company, Rockdale	825	1,073
California Company, Dallas	1,638,535	1,318,031
Chalk, Otis and Mary, Big Spring	4,520	3,174
Callihan, Geo., and Carter Development Company, Albany	2,788	3,572
Cole, W. C., Wichita Falls	1,548	2,113
Campbell, Alma, Fort Worth	1,238	1,667
Collins, W. P., Breckenridge	842	1,105
Clem Oil Company, Houston	472	401
Carey, E. S., et al, Wichita Falls	86	92
Carey, E. S., et al, Wichita Falls	649	804
Cisco Oil Company, Tulsa	20,648	24,808
Campbell, Walter K., Wichita Falls	690	994
Cosden Oil Company, Fort Worth	552,908	539,474
Curtis, J. A., Wichita Falls	1,691	2,549
Carter, Roy I., Wichita Falls	20,279	16,083
Cullum, F. P., Wichita Falls	9,543	12,820
Cranfill Brothers Oil Company, Dallas	83,912	63,987
Cranfill Brothers Oil Company, Wichita Falls	8,623	12,243
Coline Oil Corporation, Oklahoma City	4,730	6,527
Cornhusker Oil Company, Laredo	1,496	1,272
Clark, C. W., Wichita Falls	13,129	18,959
Coffield & Hale Oil Company, Rockdale	1,694	2,187
Clark-Buffalo Oil Corporation, Buffalo, New York	751	970
Crosbie, J. E., Inc., Tulsa	5,042	4,314
Campbell, R. S., Humble	735	794
Center Field Oil Company, Amarillo	370	342
Champlin Refining Company, Enid, Oklahoma	243,299	287,638
Campbell, R. S. (3-31-29), Humble	883	868
Cox, Edwin B., Ardmore, Oklahoma	2,076	2,601
Corvette Oil Corporation, Fort Worth	6,425	4,668
Chestnut & Smith Corporation, Tulsa	8,150	11,249
Conner, Son & Cloughley, Gotebo, Oklahoma	11,972	16,586
Cohen, Aaron, Baltimore, Maryland	6,330	9,117
Clay, J. D., Houston	2,304	2,438
Clayton Key Oil & Gas Company, Amarillo	4,198	5,032
Cunningham, J. C., Graham	5,454	6,851
Cunningham & Lynch, Graham	18,300	25,168
Carlin, W. W., Ranger	849	1,180
Carlin, W. W., (3-31-30), Ranger	1,185	1,860
Carlin & Tobin, Ranger	379	530
Carlin & Tobin, (3-31-30), Ranger	306	474
Conway Brothers, Ranger	4,636	6,996
Conway Brothers, Ranger	396	464
Conway Brothers, Ranger	3,247	4,528
Cuno, Mrs. Bertha, Moran	1,889	2,462
Capitol Oil Company, Orange	1,319	1,516
Cosden, J. S., Inc., Fort Worth	6,589	8,550
Canyon Oil & Gas Company, Inc., Cross Plains	1,937	2,456
Cashdollar & Snyder, Brownwood	243	275
Derosa Oil & Gas Company, Amarillo	37,321	50,746
DeMont, Ira N., Cross Cut	184	197
Decatur Oil Company, et al (3-31-30), Wichita Falls	857	975
Dale & Crawford, Electra	658	935
Davis, W. F., (audit) Wichita Falls	2,194	3,260
Dayton Oil Company, Dayton	80	92
Deering, John A., Houston	91,510	109,938
Dixon Creek Oil Company, Amarillo	79,320	77,505
Douglas Oil Company, Tulsa	14,117	18,453
Dominion Oil Company, Tulsa	477	632
Dalton, Jack, Oil Company, Fort Worth	1,431	1,962
Duffield & Howard Oil Company, Tulsa	757	891
Danciger Oil & Refining Company of Texas, Fort Worth	371,581	438,281
Deutser, B., Tr., Beaumont	1,285	1,478
Davis, Beatrice H., Tulsa	2	2
Davis, Louise Reyman, Tulsa	2	2
Dunigan Brothers, Breckenridge	5,238	6,876
Caroline A. Davis, Somerset	291	311
Dallas Petroleum Company, Houston	320	452
Derby Oil Company, Wichita, Kansas	3,712	3,436
Derby & Haines, Wichita, Kansas	3,821	3,789
Derby, Haines & Williams, Wichita, Kansas	833	648
Derby Oil Company, Wichita, Kansas	10,706	13,714
Davis Oil Corporation, Vernon	51,507	67,062
Dale, Jack B., Wichita Falls	3,117	4,393
Duquesne Oil Corporation, Eastland	79	99
Dennis, J. S., Moran	2,137	2,669
Dixie Oil Company, Inc., Tulsa	125,466	89,656
Duke, W. R., Wichita Falls	2,166	1,823
Dunaway, J. E., et al, Wichita Falls	3,950	5,235
Delmar Oil Company, Bartlesville, Oklahoma	52,838	59,086
Douglas Brothers Oil Company, Electra	1,854	2,669
Douglas Production Company, Electra	1,338	1,814
Douglas Brothers & Johns, Electra	439	603
Dean Oil Company, Burkburnett	396	506
Dunaway, J. E., Wichita Falls	398	531
Dorian, R. P., Wichita Falls	7,282	10,041
Denwich Oil Company, Abilene	1,079	1,482
Dye & Gillette, Tulsa	9,600	11,572
Devonian Oil Company, Tulsa	29,437	34,453
Dale-Knotts Oil Company, Wichita Falls	295	429
Dunigan, et al, Pampa	993	1,037

Name—Address—	Barrels	Value
Darby Petroleum Corporation, Tulsa	15,821	19,515
Dittman & Black, Fort Stockton	6,497	5,499
Emerald Oil Company of Texas, Winfield, Kansas.	2,651	2,135
Eggers, J. E., Tr., San Antonio	369	399
Electra Production Company, Inc., Electra	711	976
Eddleman & Payne, Inc., Wichita Falls	4,862	6,998
Elsik & Pomykal, Jr., Brenham	994	733
Engel, E. A., Albany	4,489	6,063
Edmondson, J. M., San Antonio	1,250	1,395
Evert & Jameson, Wichita Falls	6,322	9,841
Eddy Oil Company, Beaumont	754	867
Easton, E. S., Wichita Falls	986	1,383
Ewmo Oil Corporation, Abilene	8,406	10,255
Eubank, R. O. and B. K., Cross Plains	848	1,580
El Rio Oil Company, Amarillo	277	243
Empire Gas & Fuel Company, Maine, Bartlesville, Oklahoma	615,994	742,211
Eastland Oil Company, Fort Worth	61,775	67,478
East Batson Oil Company, Batson	14,084	16,127
Ellis & Lancaster, Beaumont	330	380
Erie Investments Limited of Texas, Toronto, Can.	470	582
Ernest Oil Company, Rockdale	200	225
Erlewine, A. J., et al, Wilson, Oklahoma	2,390	2,449
Fox & Adams, Burkett	12,783	14,928
Fresno Oil Company, Wichita Falls	31,717	41,867
Fountain Production Company, Saratoga	2,296	2,146
F. H. & E. Oil Company, Sherman	22,335	27,880
Fort Bend Oil Company, et al, Houston	11,977	12,751
Fort Bend Oil Company, Houston	4,912	5,609
Forest Oil Company, Luling	4,656	4,889
Frontier Oil Company, San Antonio	9,614	11,433
Farlyn Oil Company, Houston	10,690	7,564
Forester, A. R., Coleman	84	126
French Oil Corporation, San Antonio	5,304	4,508
Farish & Ireland Lease, Houston	5,498	6,243
Fox, Perry I. and Wm. R. Thorsen, Mertzon	1,695	1,680
Faith Oil Corporation, Wichita Falls	207	187
Four Oil Company, Wichita Falls	1,960	2,583
Flynn, W. B., Beaumont	12,363	14,508
Falls Production Company, Wichita Falls	3,270	4,523
Freeman-Hampton Oil Corporation, Wichita Falls	6,476	8,653
Freeman, J. H., Wichita Falls	3,756	4,843
Fain-McGaha Oil Corporation, Wichita Falls	432,406	577,110
Finston, Mark, Special Account, Tulsa	12,140	15,214
Ferguson & Watson, Electra	1,215	1,715
Franklin, Wirt, Ardmore, Oklahoma	332	471
Fraser, H. H., Wichita Falls	11,178	15,713
Farmers State Bank, Burkburnett	505	635
F. N. Bank-Voe Wright, Wichita Falls	144	199
Fultz, S. B., et al, Graham	5,635	7,400
Fisher, J. A., Wichita Falls	1,071	1,452
Gandy-Peyton Oil Company, Wortham	1,031	1,276
Goldsmith, N. D., Olney	10,212	14,371
Grassroots Oil Company, Fort Worth	1,605	2,220
Glenridge Oil Corporation, St. Louis, Missouri	3,453	4,531
Gilbert Company, Beaumont	6,885	7,918
Glover and Wall, Vernon	413	554
Gibson Oil Corporation, Amarillo	37,039	40,480
G. & K. Production Company, Fredericksburg	1,073	1,213
Grisham-Hunter Corporation, Abilene	3,505	4,284
Gates-Bacon-Lea, Wichita Falls	4,822	6,357
Granite Oil & Gas Company, Ridgway, Colorado	359	519
Gray & Adams, Inc., Gainesville	2,287	2,315
Group No. 1 Oil Corporation, Big Lake	516,919	724,537
Gultex Production Company, Waxahachie	668	936
Goodwin, P. B., Tr., Breckenridge	4,698	3,635
Goodwin & White, et al, Breckenridge	517	682
Godley Oil & Gas Company, Dallas	27,236	26,196
Gladis Oil Company, Saratoga	2,973	2,330
Gordon, Ann B., Oil Company, Inc., Dallas	6,083	9,029
Gibson & Johnson, Inc., Fort Worth	11,970	17,940
Gilliland-Rosser Oil Company, Wichita Falls	11,873	16,911
Gilliland, C. W., Wichita Falls	2,669	3,690
Graham & Lash, Cisco	360	516
Green & Owens, Brownwood	478	685
Grayback Development Corporation, Wichita Falls	39,941	51,613
Gwynn-Boyd Drilling Company, Wichita Falls	10,553	14,886
Gwynn, P. F., Indv. Agt., Wichita Falls	1,297	1,911
Gwynn, P. F., Wichita Falls	478	686
Guinn Production Company, Cross Plains	1,260	1,819
Gopher Oil Company, Amarillo	1,550	1,861
Grayburg Oil Company, San Antonio	179,347	151,932
Gaither Production Company, Rockdale	755	982
Gordon Oil Company of Texas, Logan, Ohio	79	100
Gulf Production Company, Houston	7,345,267	7,259,214
Gates Oil Company, Ardmore, Oklahoma	2,769	3,830
Golden West Oil Company, San Antonio	22,420	20,715
Grady, D., T. W. Roberts Lease, Electra	343	479
Grady, D., Electra	482	699
Gilman, R. F., and J. L. McMurray, Cisco	11,919	15,945
Graham & Harrison, South Bend	4,838	6,669
Glass Brothers, Rosebud	520	663
Grayce Oil Company, Wichita Falls	19,232	26,026
Gorsuch Oil Company, Abilene	4,409	5,880
Ginter Lang Oil Company, San Antonio	1,378	1,672
Ginter Jones Oil Company, San Antonio	444	506
Golding, Dudley S., Wichita Falls	27,969	25,990
Guernsey Oil & Gas Company, Pampa	18,685	26,153
Gallagher & Lawson, Desdemona	330	406
Golding & Cochran, Wichita Falls	46,411	62,708
Gainesville Oil & Development Company, Gainesville	1,150	1,140
Guthrie, Cole & Ferguson, Wichita Falls	647	849
Guaranty Oil Company, Electra	52	72
Greene Production Company, Fort Worth	40,305	37,992
Guernsey Oil & Gas Company, (3-31-30), Pampa	13,681	18,082
Gardner, Wilson & McCaldin, Wichita Falls	1,005	1,409
Graham, Lake Oil Company, Houston	2,842	3,463
Gray, K. C., Vernon	395	505
Gillman Brothers, Amarillo	1,154	1,274
Gillette, C. W., et al, Tulsa	1,538	2,287
Gates Oil Company, New York, N. Y.	3,388	3,336
Galves Oil Corporation, Tulsa	4,579	6,031
Godfrey, F. L., Enid, Oklahoma	56	68
Hickory Oil & Gas Corporation, Fort Worth	996	1,316
Hyer, Fred, Fort Worth	22,446	18,502
Hendrick, August, Moran	153	171
Hill, W. R., Tr., Burkburnett	182	263
Howard, Duffield & Berlin, Tulsa	1,416	1,656
Hyde Production Company, Houston	2,977	3,206
Harrison Oil Company, Houston	34,939	48,975
Hyde, George, Houston	4,425	4,700
Hadlock Oil Corporation, El Paso	671	678
Hedrick-Camp Drilling Company, Wichita Falls	12,966	17,630
Houghland Production Company, Dallas	2,582	2,985
Hunter, T. F., Wichita Falls	32,656	46,647
Heidrich, E. C., Jr., Amarillo	5,847	5,961
Holloway, R. R., Recv., Brownwood	1,219	1,537
Hawkins, W. L., Wichita Falls	2,252	2,701
Hamilton, W. B., Wichita Falls	159	178
Houston Production Company, Houston	55,814	66,471
Hardy Oil Company, Wichita Falls	1,682	2,338
Hoffman & Page Company, Eastland	26,823	35,583
Howard County Oil Corporation, Big Spring	36,785	30,771
Hefley, McIntosh & Thomas, Cameron	571	721
Hardie, J. M., & Company, Sour Lake	169	187
Helvetia Oil Company, San Antonio	11,091	12,297
Hunter Oil Corporation, Chicago	32,256	45,411
Hammon, W. H., Wichita Falls	23,930	34,269
Hammon & Heyser, Wichita Falls	10,517	14,040
Hobbs Oil Company, Tulsa	1,057	1,464
Hammum Oil Company (3-31-30), Smithport, Pennsylvania	334	410
Hammum Oil Company, Smithport, Pennsylvania	203	229
Herring, S. C., Brownwood	958	1,378
Hirvey, T. J., et al, Corsicana	59	75
Hope Oil & Gas Company, Fort Worth	9,625	12,689
Herbert Oil Company of Texas, Fort Worth	7,807	10,340
Hoffman, P. L., Cisco	1,605	2,247
Hickok Producing & Development Company, Toledo, Ohio	642	756
Hill & Dowell, Batson	11,508	13,235
Hines, Harry, Wichita Falls	3,335	4,819
Hamilton, W. L., Bridgetown	916	1,300
Howell, M. L., Lohn	520	639
Hawley, J. A., Guardian, Ottawa, Ontario, Canada	212	273
Halliday, H. J., Beaumont	831	946
Halliday & Laughman, Beaumont	396	456
Howard Petroleum Corporation, Tulsa	1,057	1,258
Hanlon Gasoline Company, Tulsa	1,434	1,769
Hart Oil Corporation, Fort Worth	221	317
Holcombe, Thos., Wichita Falls	957	1,327
Humble Oil & Refining Company, Houston	7,622,276	8,493,953
Houseman, D. H., & Company, Dallas	29	41
Hitchman & Howard, Inc., San Antonio	1,958	2,509
Hemby, J. M., Electra	951	1,309
Harris & Simmons, Tulsa	5,554	3,864
Houston Oil Company of Texas, et al, Houston	552,268	477,423
Hamilton & Martin, Wichita Falls	1,427	1,906
Hoppes, W. T., Burkburnett	599	835
Hoppes, W. T., Burkburnett	62	86
H-Y Oil Company, Inc., Fort Worth	16,907	22,965
Hamilton, Walter R., Tr., San Antonio	4,164	5,328
Huffman Oil Corporation, Amarillo	3,411	2,925
Huffman Oil Corporation, Amarillo	3,946	3,766
Hemisphere Oil Corporation, New York, N. Y.	18,794	22,618
Herrogan Oil Corporation, Pampa	18,945	21,611
Hart, J. R., Baird	552	751
Halmack Oil Company, Dallas	222	319
Hamon, Jake L., Ardmore, Oklahoma	27,313	37,827
Harper Petroleum Corporation, Bryson	44,655	63,327
Harwell, E. P., Tulsa	1,838	2,634
Hedges, F. M., Wichita Falls	207	287
Heydrick, L. C., Wichita Falls	15,882	19,769
Hensen, G. D., and R. V. Tidwell, Graham	6,438	8,804
Holbrook & Woods, Wichita Falls	6,236	8,417
Homaokla Oil Company, Tulsa	3,703	5,632
Holmes, Hill, Seibold & Holmes, Amarillo	17,535	23,245
Holmes, Huey & Holmes, Amarillo	17,764	23,497
Holmes, W. H. and W. W., Amarillo	1,491	1,910
Houston Gulf Gas Company, Houston	7,739	6,683
Humphreys Brothers, Inc., Houston	1,891	2,546
Humphreys Corporation, Houston	400,852	458,785

Name—Address—	Barrels	Value
H. B. J. Oil & Gas Trust, Baltimore, Maryland	1,956	2,675
Hobson & Voorhees, San Antonio	563	715
Holmes & Huey, Borger	1,913	1,989
Home Oil & Gas Company, Inc., Albany	1,939	2,458
Horn, T. W., Houston	1,398	1,608
Haulon Gasoline Company, Tulsa	1,811	2,304
Hobbs, Ferguson & Neeley, Adams & Gibson, Tulsa	1,634	2,182
Holder, F. W., Breckenridge	281	330
Hughes, J. K., Oil Company, Mexia	19,587	24,869
Hampton & Wilson, Wichita Falls	115	138
Hambleton, George, San Antonio	384	423
Indian, The Big, Oil & Development Company, Gainesville	1,049	1,416
Infield Petroleum Company, Austin	592	674
Independent Oil & Gas Company, Tulsa	482,507	446,295
Isaacs, B. K., Recv. J. K. Hughes Development Company, Fort Worth	1,051	1,151
Ingram, J. A., Shawnee, Oklahoma	705	722
Irick Oil Company, Waskom	189	238
Jones, J. A., Moran	250	355
Jones, J. F., et al, Abilene	170	201
Jones, O. P., and C. J. Oates, Ptnshp, Amarillo	2,002	2,105
Jackson Company, San Antonio	961	1,074
Julia Oil Company, Sour Lake	3,123	3,591
Judson Oil Company, Tulsa	6,543	9,140
Jackson, J. S., Tr., Sour Lake	2,723	3,131
Jones, Edwin H., San Antonio	128,378	113,577
Janellen Oil Company, Tulsa	230	272
Justin Oil Corporation, et al, Wichita Falls	7,792	11,204
James, Tom, Albany	7,452	10,255
Johnson Brothers, San Antonio	5,567	6,694
Jones, W. A., Minerva	1,802	2,245
Jones, Hugh, Burkburnett	3,085	4,041
Jones, J. E., Wichita Falls	2,665	3,674
Jacob Oil & Gas Company, Graham	1,503	2,245
Johnson, D. O., Wichita Falls	22,039	30,979
Jackson, T. H., Sipe Springs	86	103
Kay, A. W., Recv., Graham	975	1,310
Kimmell & Woofter, Wichita Falls	4,823	7,203
Kimbell, Geo. T., and John L. Bostic, Burkburnett	4,629	6,110
King, R. A., Tr., Wichita Falls	2,506	2,130
Kent, G. C. Corsicana	19,040	22,698
Knotts, F. G., Wichita Falls	654	940
Kerr, T. P., Corsicana	517	678
Kleiner, Charles J., Cisco	23,814	32,114
Kleinfelder, B. F., Breckenridge	326	433
Knowles, R. L. (1-1929/1-1930), New York	3,823	139
Kay, A. W., and W. B. Fultz, Graham	15,524	21,454
Kuhlemeier-Kleiner Oil Company, Cisco	914	1,261
King Royalty Company, Wichita Falls	148,589	205,089
Keck Investment Company, Los Angeles, Calif.	5,539	4,902
Kemrow Company, Wooster, Ohio	13,237	18,303
Kokomo Petroleum Company, Gorman	386	525
King & Daniel, Wichita Falls	5,995	8,549
Kelly, Geo. L., Tr., Wichita Falls	393	535
Kurz, A. A., (3-31-30), Somerset	303	335
Kurz, A. A., Somerset	303	347
Kahle, Gracey & Diver, Bridgeport, Illinois	2,982	2,111
Kurz Oil Company, Somerset	463	473
Kirby Petroleum Company, Houston	91,121	73,595
Knox, D. M., Graham	52,196	73,086
Keystone Production Company of Texas, Fort Worth	2,722	3,841
Kidney-Kamon et al, Fort Worth	3,941	5,656
Kavanaugh Petroleum Company, Houston	4,069	5,353
Kewanee Oil & Gas Company, Titusville, Pennsylvania	162,316	223,008
Kate Bell Oil Company, Dallas	723	1,006
Keener Oil & Gas Company of Texas, Tulsa	3,814	4,967
Killam, O. W., Laredo	180,332	150,643
Kisk Oil Company, Wichita Falls	899	1,176
Klemeke, George, Tr., Von Ormy	1,442	1,531
Kolp, C. F., Electra	23,347	30,927
Kohlman, Richard, Iowa Park	458	633
Kaufman, L., San Antonio	303	309
King, Anna B., Muskogee, Oklahoma	215	149
Kirk & Son, Gorman	9,995	11,450
Kistler, Frank E., & Company, New York	4,596	4,120
Laredo Gas & Petroleum Company (3-31-30), San Antonio	28,310	15,120
Lytle, C. F., Mexia	12,745	16,098
Lee, Homer, Wichita Falls	13,179	18,125
Loggie & Arendt Oil Company, Albany	2,156	2,630
Lockhart & Company, Los Angeles, California	88,828	91,348
Logban, J. T., et al, Electra	52	71
Lowe, Delaney & Carter, DeLeon	246	300
Laredo Oil Company, Laredo	723	723
Letwin & Lippitt, Breckenridge	12,945	17,200
Lewis Production Company, Pittsburgh	64,550	82,296
Lion Oil Refining Company, El Dorado, Arkansas	576,604	441,738
Long, Roy, Oil Company, Navasota	1,797	2,390
Lynch, Jno. D., Tr., Sioux Falls, South Dakota	1,486	2,211

Name—Address—	Barrels	Value
Lesh & McCall, Nocona	21,714	15,039
Lake View Oil Company, Sour Lake	11,040	12,695
Lido Oil Company and McGinley Sigler Company, Wichita Falls and Fort Worth	35,782	41,926
Louisiana Oil Refining Corporation, Shreveport, Louisiana	236,528	266,841
Landreth Production Corporation, Fort Worth	413,524	358,365
Lawson, Eugene B., Tulsa	66,302	88,487
Laredo Oil Company, Laredo	481	530
Little, Wm., Breckenridge	245	308
Little Caddo Syndicate, Fort Worth	1,383	1,993
Luling Oil & Gas Company, San Antonio	54,881	46,171
Lebow, C. H., Tulsa	1,228	1,786
Long, C. B., et al, Wichita Falls	298	365
Lackey, W. G., Company, Tulsa	1,980	2,561
Lomax, Thornton, Jr., Wichita Falls	2,014	2,881
Lefors Petroleum Company, Lefors	39,117	46,704
Leiser-Rochmill Production Company, Inc., Fort Worth	1,451	1,886
Len-Cook Oil Company, Electra	439	617
Linedo Oil Company, Lincoln, Nebraska	1,016	863
Little Flower Oil Company, St. Louis, Missouri	343	416
Levy & Evans, Tr., Fort Worth	81	91
Levy, Leonard M., Tr. No. 2, Fort Worth	1,128	1,532
Lindsay, R. W., Drilling Company, Graham	1,308	1,841
Lesh, John I., & Company, Wichita Falls	6,101	4,507
Levy, Leonard M., tr. No. 1, Fort Worth	2,109	2,865
Lone Star Gas Company, Dallas	58,903	88,414
Lewis, J. E., et al, Eastland	1,091	1,447
Lowenstein Oil Company, Rockdale	1,024	1,301
Lee, T. P., and E. M. Wilson, Houston	5,485	5,955
Ledger Oil & Gas Company, Brownwood	826	1,140
Long, L. A., (3-31-30), Graham	5,929	8,946
Long, L. A., Graham	25,951	36,836
Lewis, J. E., & Company, Eastland	1,477	2,197
Last Chance Gas Company, Pampa	1,077	1,453
LaSalle Petroleum Company, Tulsa	3,690	4,828
Lesh, Kilcrease & Company, Nocona	2,229	1,747
Leonard, Geo., Somerset	963	1,016
Leonard Oil Company, Somerset	194	205
Lain Oil Company, Somerset	1,190	1,273
Lain Oil Company (3-31-30), Somerset	1,202	1,346
Lee & Scott, Inc., Houston	1,760	2,024
McFall, J. M., Wichita Falls	638	885
McDaniel Oil Corporation, Cisco	4,885	7,198
McLean, Marrs, Beaumont	66,600	62,651
McCarter, R. C., Rising Star	419	549
McLester Oil Company, Eastland	9,520	14,564
McMurray, J. L., et al, Cisco	2,010	2,396
McJunkin, Florence T., et al, Tulsa	633	883
McAlbert Oil Company, Inc., Houston	1,265	1,253
McAlbert Oil Company, Inc., Houston	142,344	153,059
McNamara Oil Company, Beaumont	2,404	2,764
McBride, W. C., Inc., St. Louis, Missouri	5,775	7,087
McCutchen, C. E., Tr., Wichita Falls	6,694	9,277
McCutchen, C. E., Wichita Falls	352	499
MacDermett, Fort Worth	695	957
McDonald & Campbell, Dallas	13,102	17,176
McGinley-Sigler Company, Fort Worth	8,971	10,498
McMan Oil & Gas Company, Tulsa	1,217,272	1,159,280
McMurray, Root & Rhodes, Eastland	953	1,448
McCrary, E. W., Tulsa	5,500	6,897
McChesney, Nancy, Olney	5,156	6,392
McNallen & Griffin, Tulsa	5,438	7,035
McCarty Oil Company, Wichita Falls	84,324	120,715
Minerva Petroleum Company, Minerva	684	920
Major, A. W., Laredo	3,438	2,881
Mordyan Petroleum Company, Pampa	51,230	64,508
Mason, J. F., (Ogle Lease) (6-30-30), Putnam	1,943	2,614
Mason, J. F., (Williams Lease) (3-31-30), Putnam	845	1,115
Mason, J. F., (Ogle Lease) (3-31-30), Putnam	2,118	2,791
Mason, J. F., (Williams Lease) (6-30-30), Putnam	1,044	1,430
Milham Corporation of Texas, San Antonio	2,047	2,889
Meredith & Gant, Wichita Falls	2,340	2,748
Macknold Company, San Antonio	210	212
Mecom Oil Company, Liberty	2,555	2,939
Minor Oil Company, Beaumont	8,174	9,400
J. D. Meredith, Receiver, Oyler & Morris Lease, Moran	4,053	4,371
Mills & Garitty, Corsicana	1,838	2,022
Montgomery-Rea-Montgomery, Sedgwick	1,270	1,710
Midland Oil Company, Fort Worth	385	435
Mudge Oil Company of Texas, Pittsburgh	.....	.....
McIlroy Oil Company, Amarillo	34,275	31,993
Millikin, L. L., Burkburnett	319	416
Moran Company, Wichita Falls	17,986	22,332
Midwest and Gulf Company of Texas, Tulsa	1,515	1,683
Murchison Oil Company, Fort Worth	62,814	51,396
Minnehoma Oil & Gas Company, Tulsa	1,564	1,398
Mitcham, G. P., (3-31-30), Cisco	952	1,188
Mitcham, G. P., (6-30-30), Cisco	906	1,185
Mid-Continent Petroleum Corporation, Tulsa	15,237	19,875
Moss, Urschel & Keys, Dallas	9,293	11,883
Moss and Urschel, Dallas	14,304	18,004
Merrick & Bristow, Ardmore, Oklahoma	58,608	37,375
Merrick & Lamb, Ardmore, Oklahoma	31,739	28,836

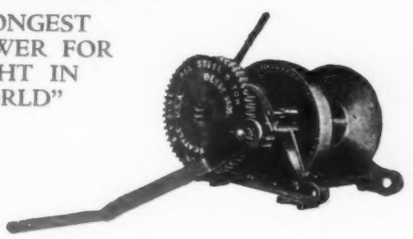
Name—Address—	Barrels	Value
Mid-Kansas Oil & Gas Company, Findlay, Ohio	4,851,448	3,905,008
Merrick & Belcher, Wichita Falls	7,661	11,927
Merrick & Goldsmith, Wichita Falls	5,978	8,495
Magnolia Petroleum Company, Dallas	3,137,380	3,330,974
Marquett Oil Company, Albany	834	1,050
Midwest Exploration Company, Denver, Colorado.	179,406	220,207
Minnich, A., Archer City	205	226
Marine Corporation, Dallas	4,144	3,600
Marnet Oil & Gas Company, Tulsa	5,484	7,205
Moody Seagraves Producing Company, San Antonio.	635,363	597,433
Morgan, Roy, et al, Fort Worth	954	1,334
Moore, N. A., Eastland	795	1,124
Mendenhall Oil Company, Cisco	1,327	1,971
Madden, E. B., Olney	14,316	22,331
Madden & Hunt, Olney	19,762	32,539
Madden, E. B., Olney	2,533	3,671
Medio Oil Company, San Antonio	968	1,152
Madison Oil & Gas Company, Electra	4,315	6,264
Mount & Lee, Inc., Wichita Falls	1,963	2,545
Martin & Hamilton, Wichita Falls	3,284	3,974
Martin, N. H., Wichita Falls	27,584	32,447
Maxwell, J. C., Fort Worth	53,997	46,718
Magee, R. B., Electra	1,053	1,456
Medina Oil & Gas Association, San Antonio	152	168
Mann & Forbes, Graham	3,286	3,493
Mann, Floyd, Graham	1,331	1,830
Marts, E. R., Dallas	2,711	3,468
Mansie, J. H., Wichita Falls	114,293	160,231
Maybery, C. R., Company, Laredo	2,287	1,944
M. C. H. Oil Corporation, Albany	877	1,036
Mills Bennett Production Company, Houston	410,124	438,120
Moore, F. L., Trustee, Tulsa	1,643	2,071
Morgan, T. P., San Antonio	16,895	2,456
Mues and MacDermott, Fort Worth	328	435
Menke, John G., Wichita Falls	1,144	1,554
Mennis, G. W., First Nat'l Bank, Executor, Wichita Falls	3,195	4,223
Mozzie Oil Corporation, Eastland	1,493	1,831
Minnetex Oil Corporation, Wichita Falls	762	900
Marshall, George S., Laredo	5,599	4,759
Meridian Petroleum Corporation, Tulsa	3,756	4,846
Moody Corporation (3-31-30), Tulsa	601,919	496,221
Moody Corporation, Tulsa	356,628	456,457
Mid-Continent Holding Corporation (3-31-30), Wichita Falls	14,920	20,814
Meredith & Benton & Curt Herrmaun, Cisco	584	798
Newport and Ohio Petroleum Company, Newport, New York	473	644
National Oil Company, San Antonio	667	686
Newton & Lillie, Shreveport, Louisiana	18,116	20,694
Navarro Oil Company Houston	199,127	213,127
Number Nine Oil Corp., Tulsa, Okla.	2,741	3,755
Nabob Oil & Gas Co., Amarillo	22,649	27,278
Newton-Palmer Oil Co., Rockdale	373	489
Nimrod Oil Co., Dallas	90	123
Noack & Lanning-Phillips & Perry, Rockdale	75	96
Nash & Windfohr Oil Corp., Graham	194,420	278,098
Nash, Windfohr & Perry, Austin	53,040	55,692
Noack & Lanning-Shelton, Rockdale	229	300
Noack Oil Co., Rockdale	1,416	1,838
North Fork Oil Co., Amarillo	4,656	5,520
Nutt & Gates Wichita Falls	2,595	3,773
Nunn-Stubblefield Oil Co., Amarillo	20,382	27,515
Owenwood Pool No. 3, Fort Worth	3,889	5,042
Old Colony Oil Co., Dayton	1,147	1,289
Orange Petroleum Corp., Orangefield	24,534	28,123
Oriental Oil Co., Dallas	431	542
O'Brien, W., Amarillo	936	964
Owen-Sloan Oil Co., Philadelphia, Penn.	77,895	56,327
Olney Oil & Refining Co., Wichita Falls	187	248
Oasis Oil Co., Wichita Falls	545	706
O'Neil, John, Wichita Falls	13,229	18,239
Oil Fields Corp. of Arkansas, El Dorado, Ark.	90	121
Oldom, Wm. P., Iowa Park	667	946
Ohio Somerset Oil Co., The, Cleveland, Ohio	1,302	1,280
Ocean Oil & Refining Co., El Paso	882	882
Onsen, M. (3-31-30), Kansas City, Mo.	817	1,112
Onsen, M. (6-30-30), Kansas City, Mo.	814	1,142
Oil Royalty Corp., Brownwood	146	146
Owens, Sherwood B., Brownwood	7,338	10,149
Olean Petroleum Co., Bristow, Okla.	16,559	13,232
Oil Investment Co., Wichita Falls	1,751	2,332
Pivoto, M. E., Sour Lake	7,623	8,723
Pollard, W. E. & C. E., Pampa	4,767	5,782
Powell, F. L., Wichita Falls	365	489
Piper, L. E., Vernon	1,881	2,647
Powers Production Co., Houston	1,839	1,603
Pitzer & West, Breckenridge	20,588	29,110
Perkins & Snider Lease, Wichita Falls	4,842	7,009
Pandem Oil Corp., Wichita Falls	40,754	55,754
Pinney Oil & Gas Co., New York, N. Y.	3,395	2,974
Pearson Properties, Inc., W. L., Corpus Christi	162,906	171,051
Phillips, J. R., Amarillo	3,412	3,220
Portland Drilling Corp., Wichita Falls	727	1,001
Plymouth Oil Co., Pittsburgh, Pa.	101,428	84,826
Price, Russell & Co., Ranger	3,934	5,518
Permian Oil Co., Eastland	18,316	28,393
Pemeta Oil Co., Fort Worth	3,688	5,268
Prairie Oil & Gas Co., Prairie-Shamrock Operating Acct., Independence, Kansas	63,156	83,025
Pecos Crude Oil Purchasing Co., San Angelo	2,951	2,621
Palm et al, F. N., Albany	1,053	1,123
Powell, H. J., San Antonio	5,039	5,400
Philp Bros., Beaumont	3,832	4,365
Paraffine Oil Co., Houston	10,252	11,707
Pettit Oil Corp., Trees, La.	1,190	1,722
Pioneer Oil, Gas & Refining Co., Danville, Ill.	1,055	1,240
Putnam Oil Co., Tulsa, Okla.	38,334	51,067
Producers & Refiners Corp. of Texas, Independence Kansas	11,715	16,028
Perkins & Cullum, Wichita Falls	251,284	310,581
Perkins, J. J., Wichita Falls	2,093	1,755
Panhandle Refining Co., Wichita Falls	210,198	282,919
Pace and Ward, Breckenridge	1,697	2,232
Pure Oil Co., Chicago, Ill.	2,000,960	2,075,921
Pure Oil Co., Chicago, Ill.	482,750	559,781
Palmer & Burch, Inc., Wichita Falls	10,649	14,808
Prairie Oil & Gas Company, Independence, Kansas	1,114,630	1,222,808
Pharis Oil Co., Amarillo	389	344
Py-Tex Oil Company, Brownwood	1,110	1,603
Pace, George L., Wichita Falls	1,823	2,523
Paggi, Charles & Company, Beaumont	695	799
Paggi Brothers Oil Co., Beaumont	7,555	8,689
Palo Duro Oil Company, Amarillo	2,933	3,016
Peery, Thomas H, Wichita Falls	28,156	40,116
Petroleum Producers Company, Wichita Falls	121,820	170,331
Phillips Petroleum Company, Bartlesville, Oklahoma	2,533,680	1,596,693
Pois Fine and Schulz, Wichita Falls	771	1,103
Pois, M. et al, Wichita Falls	3,796	5,333
Pois, M., Wichita Falls	216	301
Poor Boy Oil Company, Rockdale	367	494
Pratt, Thomas H., Brenham	344	279
Producers Drilling Company, Wichita Falls	2,595	3,540
Progressive Production Company. (6-30-30) Kansas City	1,229	1,679
Progressive Production Company (3-31-30) Kansas City	1,219	1,650
Preston Oil & Gas Company, Brownwood	149	192
Pansota Oil Company, Amarillo	6,307	7,455
Parry Oil Company of Texas, Fort Worth	33	41
Producers Supply & Tool Company, Marietta, Ohio	5,450	5,437
Petroleum Investment Company, Wichita Falls	3,230	4,554
Pilkerton, F. L., Burkburnett	968	1,283
Poole, B. O., Batson	2,505	2,861
Primrose Oil Company, Sour Lake	904	1,040
Panhandle & Santa Fe Railway Company, Wichita Kansas	7,646	4,969
Quincey Oil Company, Vernon	180	256
Quinn, J. W. et al, Eastland	2,339	3,462
Quarter Oil Company, Tulsa	2,080	3,061
Richardson & Kelsey, Fort Worth	25,937	23,105
Ramming Staley & Ramming, Wichita Falls	528	683
Ramming, R. W., Wichita Falls	3	4
Ramming, William F., Wichita Falls	170	231
Robinson, Arthur D., Dallas	6,362	7,332
Rentex Oil Company, San Antonio	7,242	8,392
Rhodes and Highers, Breckenridge	4,568	6,273
Ruyle Farm & Oil Company, Wichita Falls	6,615	9,337
Red River Oil Company, Tulsa	26,368	36,552
Refugio Oil Corporation, Refugio	167,906	140,493
Richards, M. L., Wichita Ralls	309	428
Reeder, R. S., et al, Wichita Falls	1,519	2,094
Reno Oil Company, Sistersville, W. Va.	52,960	74,422
Republic Production Company, Houston	495,348	512,434
Riggs, E. R., Graham	46,997	66,596
Riggs, E. R. and J. T. Oliphant, Graham	9,006	12,148
Robertson, R. R., Wichita Falls	7,428	9,425
Riner & Omohundro, Wichita Falls	14,039	19,979
Riner & Bailey, Wichita Falls	37,402	53,231
Ryan Consolidated Petroleum Corporation, Tulsa	88,296	117,717
Rancho Oil Company, Fort Worth	12,293	15,608
Roeser & Pendleton, Inc., Fort Worth	187,615	256,988
Richardson Trust Company, Markley	2,213	2,850
Reserve Petroleum Company of Texas, Tulsa	529	766
Roth & Fauret Oil & Gas Company, Independence, Kansas	4,312	6,199
Rex Petroleum Corporation, Vinton, Louisiana	19,666	21,505
Rowe, J. C., Wichita Falls	2,893	4,135
Rycade Oil Corporation, Houston	84,037	83,321
Reed, W. M., Albany	1,330	1,628
Reinhart, M. J., Trustee, Oklahoma City	422	584
Rathke Oil Company, Wichita Falls	26,222	37,131
Remington, E. H., Newcastle	10,678	15,495
Rookwell, J. A. & Company, Warren Pa.	2,121	2,989
Rex Petroleum Corporation, Vinton, Louisiana	18,840	21,503
Reclamation Company, Fort Worth	5,548	7,183
Rockdale Junior Oil Company, Rockdale	232	296
Robinson, J. B., Sour Lake	245	282
Rio Bravo Oil Company, Houston	371,835	410,165
Rountree & White, Rockdale	620	805

Name—Address—	Barrels	Value
Rex-Tex Oil Company, Brownwood	1,110	1,603
Ruby Oil Company, Minerva	232	304
Rock Oil Corporation, Ponca City, Oklahoma	3,894	4,733
Roeser and Pendleton, Inc., Fort Worth	1,008	1,284
Ramsel, W. T. Oil Company, Rockrade	1,687	2,194
Randado Oil Corporation, Oklahoma City	19,081	16,130
Red Bank Oil Company, Tulsa	11,768	16,253
Reiter-Foster Oil Corporation, Tulsa	14,868	19,978
Root Drilling Company, Eastland	7,324	9,998
Root, Rhodes, Gilman & McMurray, Eastland	6,074	8,312
Root & Fehl, Eastland	8,367	10,946
Root & Rhodes, Eastland	4,608	6,223
Robert Oil Corporation, Breckenridge	22,475	30,776
Robinson, O. D., Pittsburgh	1,342	1,343
Russell & Wilson, Wichita Falls	3,546	4,526
Ruthada Oil Company, Ardmore, Oklahoma	1,493	1,261
Ruthada Oil Company, Ardmore, Oklahoma	19,775	18,344
Rexal Petroleum Corporation, San Antonio	15,518	16,183
Robertson Drilling Company, Fort Worth	232	307
Ranell Oil Company, Oklahoma City	4,473	6,026
Rochmill, Henry, Fort Worth	583	722
Ross, C. E., Burkburnett	444	529
Ramsey, E. H., Rising Star	602	905
Ribble, O. C., South Bend	241	328
Reeder & Scarborough, Wichita Falls	3,878	5,435
Rock Creek Oil Corporation, Amarillo	5,787	5,409
Rubsam & Hunter, Wichita Falls	5,204	7,584
Stratton, Ed. F., Pioneer	278	331
Simmons, T. K., Tulsa	1,203	1,566
Shattuck, Mrs. Wellie S., Dallas	2,985	3,935
Speed, C. D., Corsicana	231	310
Schlicher Oil Company, Beaumont	730	850
Stella Oil Company, Beaumont	12,742	14,532
Supreme Oil Company, Orange	2,916	3,312
Storey-Friebele-Duffey Oil Company, (12-31-29) Winston-Salem, N. C.	9,024	9,441
Storey-Friebele-Duffey Oil Company, (9-30-29) Winston-Salem, N. C.	7,232..	7,358
Storey-Friebele-Duffey Oil Company, (3-31-30) Winston-Salem, N. C.	7,920	6,526
Staley, J. A., Wichita Falls	1,587	2,088
Salado Oil Company, San Antonio	1,567	1,906
Southern Drilling & Production Company, Bay City	69,994	83,940
Strawn, J. C. & A. Fisher, Electra	767	953
Sireovich, A. and Mrs. F. M. Thomas, Houston	617	553
Shallow Sand Oil Company, Fort Worth	163	205
Schafiner-Wilson et al, Wichita Falls	1,915	2,909
Strelsky, Joe and Hofley, Rockdale	375	496
Smith, Levi et al, Texon	22,867	38,823
Smith, Levi and Fred Hyer, Texon	788	1,166
Smith, Levi and J. C. Shaffer, Texon	131	147
Smith, Levi, Texon	509	735
Sinclair Oil & Gas Company, Houston	299,751	328,651
Sand Creek Oil Company, Amarillo	4,012	4,318
Shackleford, F. L., (4-1-29 to 3-31-30) Wichita	3,176	4,938
Stein, H., Ranger	424	537
S. & W. Oil Company, Amarillo	7,596	6,485
Schermerhorn-Winton Company, Minneapolis, Minn.	75,906	61,281
Shamrock Oil & Gas Company, Amarillo	158,920	183,936
Sink, Joel, Corsicana	199	273
Skelly Oil Company, Tulsa	7496,87	784,279
Smor Oil Company, Graham	322	421
Staley, J. I. & Company, Wichita Falls	3,189	4,264
Staley, Wynne & Company, Wichita Falls	225,364	283,025
Summerfield Oil Company, Tulsa	176	243
Shasta Oil Company, Wichita Falls	382	501
Smith, McIntosh & Thomas, Cameron	1,182	1,541
Shell Oil Corporation, Fort Worth	10,101	14,432
Sprague Oil Company, Ardmore, Oklahoma	11,801	7,646
Storey-Friebele-Duffey Oil Company (6-30-30) Winston-Salem, N. C.	24,108	19,687
States Oil Corporation, Eastland	33,703	43,462
Schermflerhern Oil Company, Minneapolis, Minn.	166,613	122,197
Shaw, T. G. Oil Corporation, Fort Worth	89,911	109,889
Shappell Oil Company, Wichita Falls	45,589	63,040
Summit Oil & Refining Company, Amarillo	2,279	2,411
South Texas Petroleum Company, Houston	145,462	210,542
South Shore Oil Company, Houston	7,019	7,029
Skinner Oil Company, E. W., Saratoga	4,143	4,674
Sessions, I. P., Rockdale	429	547
Smith, Mrs. James L., Amarillo	5,089	6,474
Smith & Bynum, Amarillo	1,224	1,248
Sun Oil Company, Dallas	1,251,697	1,327,069
Shell Petroleum Corporation, St. Louis	4,166,995	3,990,061
Slicker, Homer, Cisco	982	1,264
Smith, E. L. Oil Company, Inc., Mexia	156,617	185,126
Schlaffko, Edward, Electra	86	114
Shertzer Brothers, Dewey, Oklahoma	6,480	9,189
Staniforth, M., Wichita Falls	10,177	14,344
Smith, R. E., Houston	23,960	24,994
Skeldon, C. P., Electra	11,024	15,251
Scarborough, W. A., Burkburnett	1,839	2,325
Somerset Oil Company, San Antonio	1,066	1,140
Somerset Crude Oil & Refining Company, Somerset	2,514	2,755
Seybert Brothers, Mooringsport, Louisiana	2,090	3,106
Swanner, John L., Wichita Falls	1,671	2,323
Standard Oil Land & Leasing Company, Electra	207	293
Southern Petroleum Exploration, Inc. Sisterville, W. Virginia	23,602	29,003
Stroube & Stroube, Corsicana	57,351	61,644
Sheffield Oil Company, Houston	3,976	4,572
Saratoga Oil Company, Wichita Falls	753	1,068
Star Drilling Company, Wichita Falls	28,050	40,248
Sedwick Oil Company, Tulsa, Okla.	9,677	12,159
Southern Crude Oil Purchasing Co., Fort Worth	2,450,790	1,863,026
Saxet Oil Company, Houston	354,750	364,899
Simpson-Fell Oil Co., Ardmore, Okla.	3,596	4,603
Simpson-Fell Oil Co. et al, Ardmore, Okla.	7,638	6,408
Seigh, N. A., San Antonio	1,091	1,323
Sinclair Oil & Gas Co., Tulsa, Okla.	92,743	132,385
Syndicate Oil Corp. (3-31-30), Rochester, N. Y.	994	1,225
Spring Creek Oil Co., Amarillo	2,624	2,700
Syndicate Oil Corp. (6-30-30), Rochester, N. Y.	902	1,362
Skia-Tex Petroleum Co., Amarillo	22,257	23,424
Syndicate Oil Corp. (6-30-30), Rochester, N. Y.	885	1,101
Simms Oil Co., Dallas	1,052,935	924,963
Sandefer Atkinson Daniel Oil Corp., Breckenridge	3,343	4,487
Slick, T. B. et al, Oklahoma City, Okla.	11,617	16,634
Scott & Walker, Albany	3,190	3,751
Sheldon, W. J., Electra	3,638	5,077
Simpson, O. H., Fort Worth	679	957
Schaffner, E. N., et al, Cross Plains	893	1,066
Scott & Britton, Graham	194	251
Scott & Nance, Graham	2,552	3,348
Savoy Oil Co., Tulsa, Okla.	28,664	21,767
Stock, H. I., Cisco	3,048	4,101
Sunray Oil Co., Tulsa, Okla.	154,460	167,170
Sullivan, M. J., Kansas City, Mo.	409	528
Smith, W. B., Trustee, Eastland	429	526
Smith, H. V., Cisco	1,980	2,091
Selby Oil & Gas Co., Tulsa, Okla.	7,064	10,770
Stump, H. J., Wichita Falls	9,840	14,063
Shaw Oil Company, Wichita Falls	63,991	86,243
Spencer, H. E., Trustee, St. Louis, Mo.	1,282	1,659
Stidham & Thrasher, Electra	499	435
Smith & Ash, Wichita Kans.	9,383	12,798
Stekell, Harry, Tulsa, Okla.	22,337	28,193
Stevoll, E. C. & Son., Graham	3,190	4,298
Storey-Friebele-Duffey Oil Co. (6-30-30), Winston-Salem, N. C.	6,345	5,423
Storey-Friebele-Duffey Oil Co. (12-31-28), Winston-Salem, N. C.	11376	7,326
Storey-Friebele-Duffey Oil Co. (3-31-29), Winston-Salem, N. C.	9,079	5,901
Storey-Friebele-Duffey Oil Co. (6-30-29), Winston-Salem, N. C.	10,101	7,838
Storey-Friebele-Duffey Oil Co. (9-30-29), Winston-Salem, N. C.	9,736	9,300
Storey-Friebele-Duffey Oil Co. (12-31-29), Winston-Salem, N. C.	13,718	13,100
Storey-Friebele-Duffey Oil Co. (3-31-30), Winston-Salem, N. C.	21,742	16,589
Snowden & McSweeney Co., New York, N. Y.	48,234	63,624
Smith, McIntosh & Thomas, Cameron	505	637
St. Marys Oil & Gas Co., St. Marys, W. Va.	46,791	50,684
Superior Oil Producing Co. (3-31-30), Tulsa, Okla.	1,815	2,405
Superior Oil Producing Co. (6-30-30), Tulsa, Okla	1,904	2,614
Spencer, H. H. & Co., Burkburnett	150	215
Tidwell, H. L., Trustee, Graham	886	1,324
Teatsorth, L., Eastland	1,583	2,089
Teatsorth, L. et al, Eastland	2,512	1,823
Thompson, J. E., Humble	564	648
Talbot & Markle, Houston	5,595	5,835
Teddlie, J. E., Liberty	9,059	10,227
Trinity Townsite Company, Dallas	758	1,008
Teci Production Co., Breckenridge	2,128	2,778
Tegler, F. F., San Antonio	283	340
Taylor-Sibley Syndicate, Dallas	2,202	3,133
Tex Cal Oil Company, Brownwood	8,667	9,867
Texas Fidelity Oil Corporation, Fort Worth	7,378	10,265
Tower & McKanna, Wichita Falls	15,369	23,614
Triangle Oil & Gas Company, Rockdale	757	984
Trimount Petroleum Co., Shreveport, La.	6,436	9,676
Timms, L. W., Oil Corporation, Amarillo	5,576	6,885
Timms-Dietsch Oil Corporation, Amarillo	5,708	7,308
Timms-Robinson Oil Corporation, Amarillo	1,413	1,757
Timms-Fogarty Oil Corporation, Amarillo	736	589
Treat, E. M., Oil & Gas Co., Pittsburgh, Pa.	1,276	1,720
Theis Oil Company, Sour Lake	3,170	3,645
Taylor-Link Oil Company, Houston	94,119	80,275
Texas Pacific Coal & Oil Company, Thurber	293,337	317,865
Texas Pacific Coal & Oil Company, Thurber	121,573	162,934
Tucker Oil Company, Wichita Falls	80,769	102,348
Turman Oil Company, Tulsa, Okla.	31,649	45,151
Transcontinental Oil Company, Tulsa, Okla.	12,901	16,932
Transcontinental Oil Company, Tulsa, Okla.	2,399,073	1,918,172
Transcontinental Oil Company, Tulsa, Okla.	4,690	6,220
Transcontinental Oil Company, Tulsa, Okla.	16,339	13,397
Thomas, J. A., Burkburnett	2,062	2,756
Timblin, W. E., Wichita Falls	162	231
Turman, L. C., Fort Worth	273,296	249,733
Texas Petroleum Development Company, Cameron	4,561	5,972
Tripplehorn, J. W. & D. R. (12-31-30), Fort Worth	3,098	4,409
Tripplehorn, J. W. & D. R. (6-30-30), Fort Worth	2,782	3,501
Thaxton, Nannie S., Austin	310	423
Tucker, Art, Graham	2,707	3,753

Name—Address—	Barrels	Value
Texon Oil & Land Co. of Texas, Big Lake	99,140	74,944
Triangle Petroleum Co., Inc., Fort Worth	797	1,099
Towns, M. K., Luling	14,327	15,043
Tannehill, L. B., Albany	47,024	63,935
Trinity Production Co., Wichita Falls	510	707
Thomas, J. Elmer, Fort Worth	280	393
Texas Petroleum Company, San Antonio	37,124	43,344
Texas Consolidated Oil Co., San Francisco, Calif.	11,392	15,337
Texas Co., The, Houston	4,361,235	5,308,812
Tholl Oil Co., Beaumont	3,606	5,566
Texas Gas Company, Houston	6,073	5,040
Tidal Oil Company, Tulsa, Okla.	289,375	272,185
Tillery, L. J., Oil Co., Inc., Beaumont	15,025	17,100
Tidwell, R. V., Trustee, Graham	3,997	5,495
Travelers Oil Company, Amarillo	14,012	15,404
Traylor-Rutherford Oil Corporation, Refugio	32,606	27,715
Traylor & Rutherford, Refugio	9,407	5,173
Texas Unity Oil Company, Houston	466	669
Thomson, F. L., San Antonio	43,143	46,534
United North & South Development Co., Abilene	21,816	24,141
United Oil Corporation, Wichita Falls	7,899	11,755
Union Oil Company of Nevada, Abilene	609	914
Underwood Drilling Co. (Erwin Lease), Wichita Falls	942	1,241
Underwood Drilling Co. (Perkins Lease), Wichita Falls	3,501	4,622
Underwood Drilling Co. (U.C.Ward Lease), Wichita Falls	1,589	2,170
Underwood Drilling Co. (Ward A Lease), Wichita Falls	3,065	4,139
Underwood Drilling Co. (Underwood & Campbell Lease), Wichita Falls	1,754	2,453
Union Producing Company, Houston	1,041,808	1,066,727
Union Oil & Mining Company, Tulsa, Okla.	8,556	10,867
Unity Oil Company, Beaumont	17,319	19,754
United Producers Company, Wichita Falls	64,798	92,545
United Royalties Corporation, Wichita Falls	333	488
Union Production Company, Inc., Rockdale	3,555	4,295
Upland Oil Company & Cady, Conner & Crenshaw, Pampa	11,091	13,757
Vacuum Oil Company, Houston	40,109	54,509
Virgil Oil & Gas Company, Wichita Falls	22,359	29,312
Victor Company, San Antonio	1,272	1,463
Venmex Oil Company of Texas, Wichita Falls	63,048	91,790
Virginia Oil Ass'n, Inc., Fort Worth	2,372	3,341
Valerio, Inc., San Antonio	492	576
Van Cleave Trust, Baltimore, Maryland	585	768
Wills, O. C., Burkburnett	1,148	1,471
Weiler, H. J., Wichita Falls	474	660
Weiler, J. G. et al, Cross Plains	2,064	2,962
Wood,Benton, Lesh & McCall, Nocona	4,552	4,054
Woodson Oil Company, Woodson	1,076	1,184
Woodburn Oil Corporation, Dallas	3,381	4,576
Woods & Bennett, Humble	6,840	7,867
Why Not Oil Company, Mexia	5,439	7,458
Webb Oil Company, Humble	4,668	5,368
Weekly Oil Corporation, Fort Worth	19,814	16,453
West, C. K., Breckenridge	2,558	3,380
Worth Petroleum Company, Fort Worth	4,406	5,684
Waggoner Refining Co., Inc., Electra	259,313	335,382
Wallace & Emrick, Minerva	384	493
Wallace & Davis, Minerva	237	302
Wallace & Davis, Minerva	311	408
Webb, J. R., Corsicana	199	259
Wentz, L. H., Oil Division, Ponca City, Okla.	8,955	6,540
Westheimer & Daube, Ardmore, Okla.	1,871	2,390
Wilson, H. F., Oil & Gas Co., Tulsa, Okla.	457,765	592,721
Wise & Jackson, Sapulpa, Okla.	8,065	10,612
Woody, W. C., Wichita Falls	28,156	40,116
Wo-Mac Oil Company, Wichita Falls	19,594	27,595
World Oil Company, Fort Worth	7,938	6,598
Webb, J. R. & J. H. Bryant, Corsicana	146	134
West, J. H. Lemon Grove, Calif.	9,053	10,789
Walton, T. J., Corsicana	50	62
White, James H., Wichita Falls	7,900	11,070
Williams, J. H., Dallas	3,929	5,338
Witherspoon Oil Co. & C. L. Witherspoon, San Antonio	31,991	32,544
Warner-Quinlan Co. of Texas, Houston	282,922	228,473
Wallace, Dr. Chas. W. and wife, Wichita Falls	47,850	67,927
Ward Oil Corporation, Ardmore, Okla.	206,174	150,866
Wilder, Jack H., Rice	600	816
West Production Company, Houston	13,209	15,710
White & Duncan, Wichita Falls	6,235	8,545
Walker, B. S., Estate, Fort Worth	685	835
Wolf, D. L. (3-31-30), Orth	7,717	10,064
Wolf D. L. (6-30-30), Orth	9,755	12,728
Watchorn, Robert, Oklahoma City, Okla.	2,914	3,391
Wilson-Broach Co., Beaumont	11,911	13,589
Whitehill Oil Corporation, Tulsa, Okla.	4,338	6,133
Wheelock & Collins, Corsicana	9,808	13,720
Witcher, Mrs. Annie L., Guardian, Wichita Falls	3,551	5,079
Wills Oil Company, Rockdale	1,169	1,524
Wise & Porterfield, Graham	6,854	9,246
Wakefield, M. E., et al, Cross Plains	64	93
Weldon Oil Co., Saratoga	11,682	10,008
Witcher, W. C., et al, Wichita Falls	531	763
West, Mrs. Bessie M., Houston	1,509	1,736
Woods, C. D. & C. C., Ranger	223	303
Woods, C. D. & C. C., Ranger	814	1,044
Walfe, A. T., Wichita Falls	5,334	7,544
Worth Oil Company, Wichita Falls	3,477	4,597
Whiteside, J. E., Brownwood	328	387
Woodley Petroleum Company, Shreveport, La.	126,144	170,037
Wichita Production Company, Wichita Falls	9,642	13,233
Wilbarger Oil Company, Wichita Falls	1,353	1,606
Wilson Drilling Company, Wichita Falls	12,351	17,333
Williams & Williams, Amarillo	571	443
Wilkins, L. A., Burkburnett	3,682	4,971
Wahpoo Oil Company, Rockdale	1,245	1,675
Waggoner, E. P. & C. F. Kolp, Electra	5,182	6,715
Weaver & Pois, Wichita Falls	2,615	3,546
Waggoner, W. T., Estate, Fort Worth	2,638	3,399
Walker, A. C., Albany	2,486	3,206
Whaley Company, Inc., Fort Worth	4,348	5,757
Wilson, Lee, Estate, et al, Wichita Falls	5,098	6,991
Weister, E. P., Tulsa, Okla.	4,661	6,150
Winrod Oil Company, Amarillo	1,811	2,355
York Petroleum Company Stamford	71	83
Young Brothers & Alexander, Inc., Fort Worth	5,629	8,104
Young Brothers & Alexander, Inc., Fort Worth	3,297	4,342
Yount-Lee Oil Company, Beaumont	1,778,814	1,918,155
Zadie Belle Oil Co., Fort Worth	480	687
Zenith Oil Producing Company, Vernon	21,698	26,024

Beebe Bros.
ALL STEEL HAND HOIST
TRADE MARK
SEATTLE, U.S.A.

"THE STRONGEST GEARED POWER FOR ITS WEIGHT IN THE WORLD"



5 TONS Capacity

Weight 110 lbs.

Capacity FIVE TON STRAIGHT LINE

Size 16x17x13" High

Two Speeds 4 to 1 24 to 1

POSITIVE INTERNAL BRAKE

Construction Eight Pieces Electrical Steel Without Keys or Setscrews

A Friend in Need to Every Oilman

The great utility, power and dependability of the Beebe All Steel Hand Hoist is bringing more and more producers to use it for emergency jobs. Does the same heavy hoisting and pulling as much more expensive equipment thus saving time and money. Quick set-up and safe, positive control.

PRICE $80

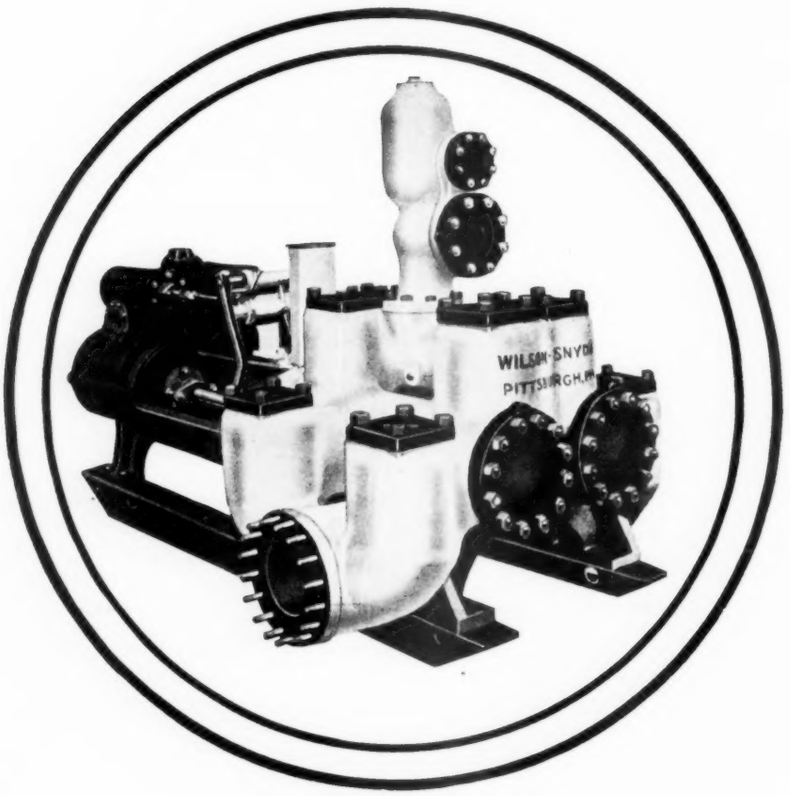
Steel Tail Hold Yoke $4 Extra. Truck Attachment Plate, $10 Extra

SOLD BY

The National Supply Companies

The CENTER of ACTIVITY

Wilson-Snyder—Power Slush Pumps "Side Suction"



Size 14″ x 7¼″ x 18″

On I. T. I. O. Coppinger No. 3, in the Oklahoma City Field, Two Wilson-Snyder Pumps are being used. With the exception of thirty hours running time the well has been drilled to a depth of 6100 feet, by ONE Pump, with no repairs needed.

The Wilson-Snyder No. 18 is a heavy duty side suction slush pump, tested to 3000 pounds pressure. With the 10 inch suction opening, the fluid cylinders are completely filled at each stroke, this feature is very important where high steam pressure is used.

DISTRIBUTED TO THE MID-CONTINENT FIELD BY

MURRAY TOOL & SUPPLY COMPANY
CLEVELAND, OKLAHOMA

STORES AT
Oklahoma City, Phone 3-7736
Pawhuska, Phone 867
Seminole, Phone 119
Tulsa, Phone 4-0144
Yale, Phone 55
Pampa, Texas Phone 894
Wichita Heights, Kansas, Phone 4-3854
Hobbs, New Mexico, Phone 127

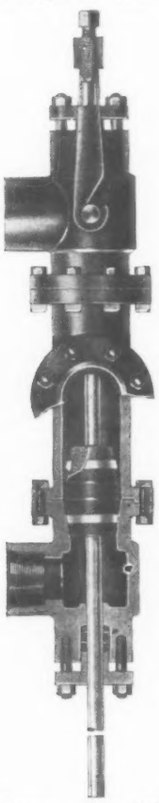
New Equipment for the Field

Machinery - Tools - Catalogs - Books

New Manifold Valve

BRAUER MACHINE & SUPPLY COMPANY

Brauer Machine & Supply Company, Oklahoma City, is now manufacturing a compounding manifold valve (yoke type). It replaces the set screw manifold valve which has been discontinued. It is the same type valve as the Brauer manifold valve control (regular type) except that it offers a number of new features over that type.



Brauer Manifold Valve

This valve is used in the manifold between the slush pumps and is for the purpose of automatically closing the discharge line of the pump not in use and diverting the flow of fluid up to the stand-pipe. In the regular type manifold valve the closing of the steam valve on the pump in use and opening the steam valve on the other pump, the fluid pressure automatically forces the double tapered plunger valve into the opposite seat and diverts the flow up through the stand-pipe. On the yoke type, by locking the plunger at either end by means of a set-screw, it can be used both for drilling and for mixing or circulating mud.

The valve is made of high cast steel and is designed so as not to sand up under any condition. An extra plunger is shipped with each valve. The packing is dovetailed in place. It is made in three-inch and four-inch sizes.

Complete details will be furnished upon request to the Oklahoma City office.

Underground Light Cable

SULLIVAN MACHINERY COMPANY

Sullivan Machinery Company, 30 Church Street, New York, announces the marketing of "Stringalite," a safety lighting cable to withstand the severe demands of underground lighting service. It is also to be used in open pits, and on construction jobs.

"Stringalite"

"Stringalite" offers the safety and utility of a permanent installation, with the wiring simplicity and economy of a temporary job. It may be installed, extended or removed within a short time, may be hung over any projecting object on the job, and no special supports nor insulators are required. The salvage value is 100 per cent.

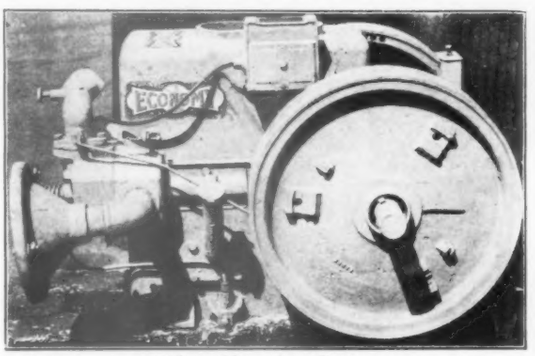
"Stringalite" is made by Rome Wire Company and consists of the "super service cord," a moulded rubber, stranded No. 10 two-conductor light cable, into which moulded rubber covered, porcelain lamp sockets are vulcanized at 33 1/3-foot intervals. Cable and connectors are tested at 1500 volts. Moulded rubber blank screw plugs are used to seal light sockets that are not in use, the whole providing a moisture and corrosion-proof, and absolutely safe lighting system.

Sullivan "Stringalite" is carried in stock in lengths of 100 and 200 feet, with three lamp sockets to every hundred-foot length, and end connectors, attached. Other lengths may be had on order, with side extension connectors if desired.

The illustration shows a length of the new "Stringalite" safety lighting cable.

Self-Oiling Gasoline Engine

HERCULES PRODUCTS, INC.



New Hercules Engine

Hercules Products, Inc., Evansville, Indiana, has recently developed the new model J self-oiling enclosed gasoline engine. This engine is designed to offer maximum portability through minimum weight per horsepower. The compactness of the engine allows it to occupy a very small space. Weight of the motor is 175 pounds.

The specifications of the engine give it an overall length of 27½ inches, and a width and height of 18 inches. It is capable of developing two horsepower at a speed of 775 r.p.m. The carburetor is of the positive suction feed type with an automatic air intake operating in conjunction with the Wico high tension magneto which gives a maximum of efficiency in speed and power. Lubrication is supplied through the splash system and the motor is water cooled. All bearings, timing gears, pistons, piston pins, cam shaft, governor and magneto trip rod are enclosed in the crank case.

Bee Line Bit Guide

HILL & FOSTER COMPANY

Hill and Foster Company, Wichita Falls, Texas, is manufacturing a guide for keeping bits rotating in a straight line in the hole. The accompanying illustration tells the story of this product, showing the possible angle of the

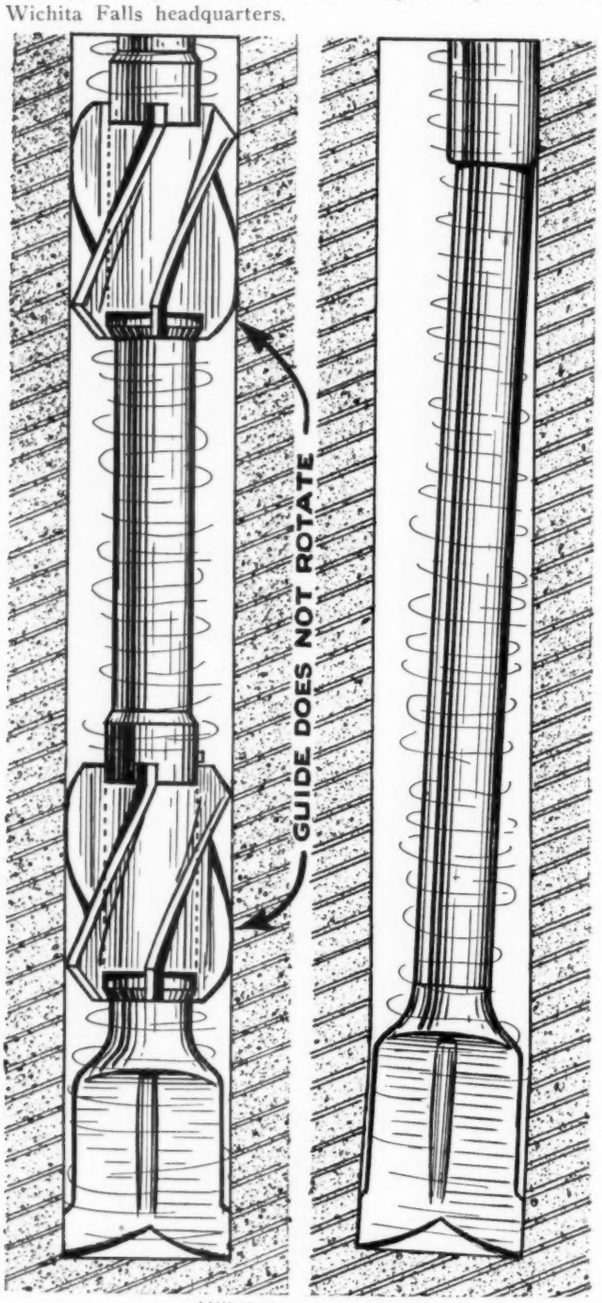
fish-tail bit under normal circumstances and again with the newly designed guide.

The guide, known as the "Bee Line" bit guide, does not rotate in the hole, and thus obviates possible damage because of its presence. It is so designed and built as to not "ball up." There is ample clearance between the guide and the drill pipe for unrestricted fluid circulation.

The major job of this guide is apparently to hold the bit against a pitched formation until the formation is penetrated vertically.

Provision is made to rotate the guide in a tight hole.

Complete information, including prices and sizes will be supplied by the manufacturers upon request to the Wichita Falls headquarters.



Hill & Foster Bit Guide

Pacemaker Jacks

BLACKHAWK MANUFACTURING COMPANY

Blackhawk Manufacturing Company, Milwaukee, announces the marketing of the new Pacemaker jacks which have been added to the company's line of 25 models from one to 75-ton jacks.

The Pacemaker jacks are 2½-ton, models BA8.5 and BA10 for light delivery trucks from one to 2½-ton capacities, a market which the manufacturer states represents between 75 and 85 per cent of the entire truck field.

The base of each jack is 3 9/16 inches by 5½ inches, sled type. The BA8.5 is 8½ inches low with a single hydraulic lift of 5½ inches and a hand extension of three inches. The BA10 is 10 inches low and has a single lift of seven inches. The head of the BA10 is integral with the plunger. Net weight of the BA8.5 is 15 pounds and the weight of the BA10 is 16½ pounds. Each jack is complete with a 34-inch handle.

More complete details are available upon request to the factory.

Walworth Company, Boston, has issued Catalog No. 88, with 754 pages devoted to listing and describing Walworth valves, fittings and tools. This catalog has 23 pages devoted to a general index in the back, with a double-page layout in the center of the book, devoted to a brief indexing of equipment by classes, is conveniently located by a slotting of the center pages.

The catalog is begun with a showing of bronze valves with the idea of giving most prominence to the quality products of a more distinctive type. On all valves recommended for oil, water and gas service, the ratings are given. Throughout the book is carried text matter giving the salient sales points of the more important items. At the beginning of the steel section is shown a steel valve and fittings recommendation chart, covering pressures, temperatures and trip materials for various classes of service.

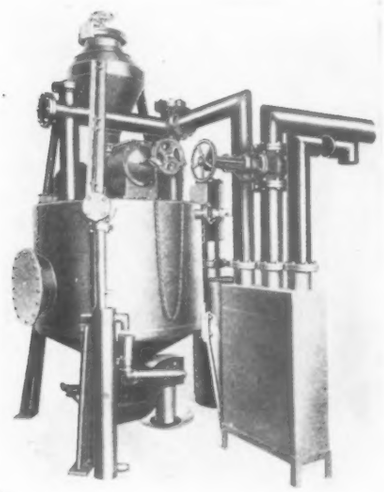
The color scheme, the binding of the book, the typography and the size of the pages combine to make a very attractive lay-out.

Chicago Bridge & Iron Works, Chicago, has recently issued a booklet entitled "The Hortonspheroid," which describes a new type of oil storage tank to withstand internal pressure. This tank, spheroidal in shape with a flattened bottom, is designed scientifically to use all the metal in its construction in the most effective manner possible.

Natural gasoline and other volatile liquids are stored in it without evaporation loss even though the liquid boils at normal temperatures.

Copies of the booklet may be obtained from the company by addressing the Chicago office.

NEW EQUIPMENT FOR THE FIELD



Oxweld Acetylene Generator

Acetylene Generator

OXWELD ACETYLENE COMPANY

Oxweld Acetylene Company, 30 East 42nd Street, New York, has placed on the market two improved types of non-automatic stationary acetylene generators for supplying large volumes of acetylene. These generators are each made in two sizes having 500 and 1000 pounds carbide capacity. They are designed for large industrial plants where oxwelding and cutting are used extensively and where oxygen and acetylene are piped to stations convenient to operators.

The Oxweld Type NA-3 acetylene generator, shown in the illustration, is for plants using low-pressure welding and cutting apparatus and delivers to a storage holder which is weighted to supply acetylene to the shop piping system at a pressure of 20-inch water column.

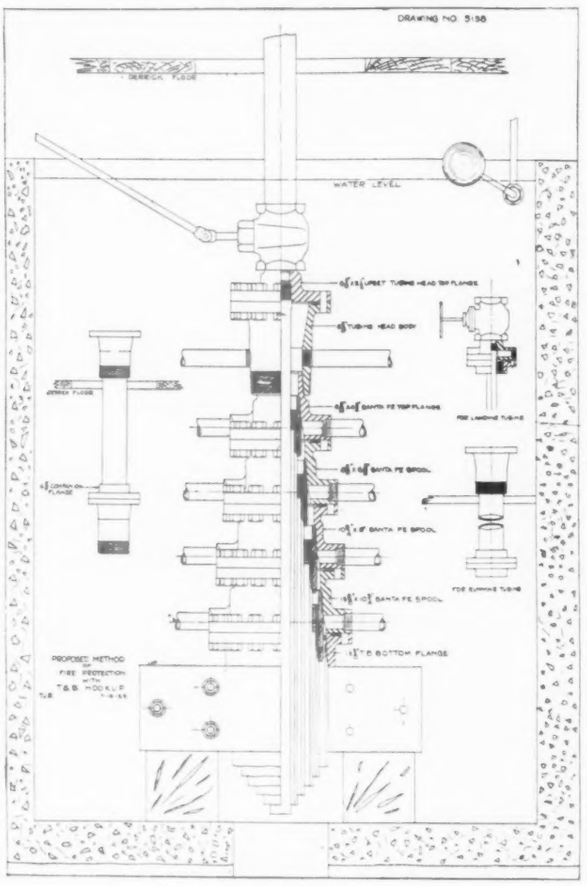
In operation, the carbide is conveyed from the hopper to the generating chamber by a rotary feed screw driven by a slow speed reciprocating water motor. The screw, being cast nickel, is very resistant to wear and will not cause sparks.

From the generator the gas enters the wash box where it passes through a water seal which acts as a scrubber to remove any particles of residue which might have been carried over. This device supplants the felt or hair filter usually employed. It has the advantage that it cannot clog and cause abnormal back pressure or insufficient delivery to the holder. It thus insures a constant generating pressure.

When residue is being drawn off from the generator the wash box acts as a vacuum release and permits a reverse flow of gas which allows acetylene to return from the holder to the generating chamber to displace the drained water. When the generator is refilled with water, the gas passes from the generating chamber to the holder through this same wash box. The wash box is provided with an overflow which automatically limits the water level to give proper depth to the seal and to permit the functioning of the vacuum release during recharging.

The gas holder of suitable size may be located either inside or outside the generator house as best meets the needs of the particular installation. On the holder is mounted an automatic water holder shut-off which stops the carbide feed mechanism. When the gas bell approaches its upper limit, this shut-off must be opened by the attendant before the generator will again produce acetylene.

Except for this one automatic feature, all operations having to do with the starting and stopping of carbide feed must be performed by the generator attendant. For this reason, the generator is classed as non-automatic, that is, the carbide feed is not automatically governed by, or interlocked with the immediate acetylene requirements.



Regan Fire-Preventing Device

Regan Forge & Engineering Company, Los Angeles, engineering department has completed a new device used for preventing hazardous fires from destroying a well. The control equipment seats in the cellar and the design is a simple method of flooding the cellar in case a nearby fire occurs. By flooding the cellar the control head is placed under water. To manipulate the valve above the tubing head a turn-buckle with universal joints is used, as shown in the accompanying illustration.

Lincoln Electric Company, Cleveland, Ohio, has published for persons interested in welding, a catalog on automatic arc welding by the Electronic Tornado process, which in 40 pages of description, illustrations and charts, gives a complete line-up of this method of welding.

Manufacturer and Supply Dealer Notes

HAYNES STELLITE COMPANY OPENS NEW FOUNDRY

Haynes Stellite Company, Kokomo, Indiana, a unit of Union Carbide and Carbon Corporation, has announced completion of a new foundry at the Kokomo works, which has been built expressly for the manufacture of the Hastelloys, a group of new acid resistant alloys. The most up-to-date and efficient foundry equipment procurable has been installed to insure careful control of quality and uniformity of product. The Hastelloys form a group of corrosion-resistant alloys with unique properties. They are of particular interest to chemical engineers, and others who have been faced with the hitherto difficult problem of providing suitable equipment for resisting the action of hydrochloric acid and moist chlorine. Hastelloy "A" resists the action of both hot and cold hydrochloric acid, while Hastelloy "C" resists the action of wet chlorine.

The production of these alloys, facilitated by the opening of this new foundry, will be of interest not only to the chemical and process industries but to all industries in which the handling of acids is a problem. Information with regard to the Hastelloys may be obtained from the various offices of Haynes Stellite Company or by writing to the general offices in Kokomo.

Bullard Davis, Inc., subsidiary of Davis Emergency Equipment Company, 67 Wall Street, New York, has completed a catalog of gas protection equipment which is now ready for distribution.

This catalog contains valuable information on new equipment, including Davis gas meters, made of Red-D rubber which offers a marked increased tendency to hold its shape, greater resistance to abrasion and remarkably longer life.

Davis ammonia masks and canisters are approved by the U. S. Bureau of Mines. Also included in this catalog is the Davis air line masks which are approved by the Accident Prevention Committee of the American Gas Association.

The new ball bearing air line mask blower may now be operated with case either open or closed.

The Davis inhalator used in conjunction with the prone pressure method of artificial respiration and approved by the American Gas Association and American Medical Association is also fully described.

Copies of this catalog will be sent upon request.

Mission Sales Company, 2416 Railroad Street, Houston, has issued an attractive eight-page catalog, which is devoted to describing and listing prices on the improved Mission slips. Following recent improvements made on the slip it was given the limit of the testing machine, 200,000 pounds without biting or bottle-necking the pipe. The pipe was removed from the slip by hand following the test, which was made in the engineering department of Rice Institute, Houston, following testing jobs on deep wells in the field. A copy of this catalog will be furnished upon request to Mission Sales Company at the above address.

The Borden Company, Warren, Ohio, announces that it will now carry in stock dies for all sizes of "Beaver" tools, specially ground for threading brass pipe, due to the constantly increasing use of brass pipe. For easy identification these dies will be copper plated, and stamped "For Brass Pipe." They will be available in supply houses.

DON D. ANGLE

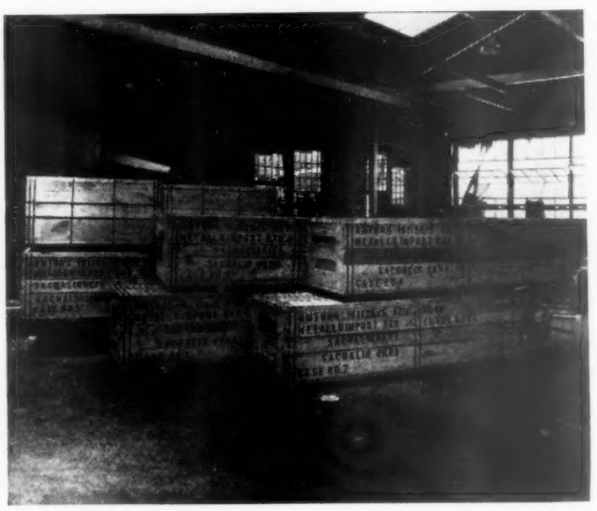
Don D. Angle, who has been instrumental in producing borium, diamonettes, angelite and other hard facing metals, has recently organized the Don D. Angle Welding Supply Company with headquarters at 1233 East 63rd Street, Los Angeles, to deal in diamond substitutes, hard facings, welding rods and welding supplies. His products will be known as diamond sub metals, and he announces that he plans to give individual service in the oil industry.

James B. Sipe & Company, paint manufacturers and engineers, Pittsburgh, has appointed Fred Devenney as district representative at Tulsa, succeeding F. W. Gumaer, effective August 1. The Tulsa office is located at 8 North Cheyenne Street. The company continues to stock Sipes paint products with the Tulsa Terminal Storage & Transfer Company.

Republic Steel Corporation's new plant devoted to the making of electric weld pipe has made available a new kind of welded pipe.

An experimental mill making only small sizes has been in production for almost a year with the result that over 2000 miles of pipe was placed in service. The many advantages of this pipe were so apparent that the demand created made necessary the building of a completely equipped new plant for making sizes from 4½ to 16 inches in diameter.

Some of the advantages claimed for Republic electric weld pipe are: Guaranteed 100 per cent efficiency of weld, uniform wall thickness, perfect roundness, uniform strength and resistance to corrosion, freedom from flat spots, scale and oxide free and smooth finish.



Shown above is a photograph taken in the Tulsa plant of the Gaso Pump & Burner Manufacturing Company, showing part of a shipment of 32 Gaso pumps recently made to Russia.

SOME ROTARY TOOLS

BY

HONEST TOOLS

HINDERLITER

ROTARY STANDARD CABLE

SQUEAKS FROM THE BULL WHEEL

Mrs. Blabber.—You're looking very happy this morning. Have you had good news?

Mrs. Gabber—Just wonderful. My husband has just had a nervous breakdown, and we're going to Europe for the summer.

Herbert—Arthur hasn't been out one night for three weeks.

Flora—Has returned over a new leaf?

Herbert—No; he's turned over a new car.

A new brakeman of Celtic origin was informed that his pay would be allowed at a certain rate per mile while on the road. The next day he was on an extra freight which broke in two on a grade, and the rear end started down the hill with Pat on top of one of the cars. The conductor yelled at him to jump. By this time the cars had attained considerable speed. Pat replied: "Jump? Not when I'm makin' money as fast as this."

Hostess—There's a terrible draught coming from somewhere, Mary.

Maid—Yes, ma'm; it's the man with the laundry bill, and he won't take his foot out of the front door.

Can you give my daughter the luxuries to which she has been accustomed?

Not much longer. That's why I want to get married.

Church was over, and the congregation formed itself into little groups in the churchyard. Presently the vicar appeared and joined a select little party. He introduced a sea captain to a wealthy and generous parishioner.

"You have seen each other in church today," said the beaming parson.

"Sure," said the old sailor. "He was sleeping in the next bunk to me."

Why did you leave New York to go and live in Pittsburgh?

To be nearer my daughter who lives in Seattle.

"This is a lovely bathing suit."

"It certainly is, Madam."

But a trifle—er—daring in design."

"Ah, Madam, a woman without a perfect figure couldn't wear this suit."

"Of course not. I'll take it."

Cannibal Ikeck—I'm going to stew both those cooks we captured from that steamer.

Cannibal Jakub—No; one is enough. Too many cooks spoil the broth.

"George, you weren't listening to what I said."

"Er—what makes you think that, my love?"

"I asked you if you could let me have $75 and you smiled and said 'Yes, dearest'."

Captain—So you're going to spend the rest of the afternoon in a steamer chair?

Seasick Blonde—Why yes, if nothing else comes up!

Dear Editor: What's the best way to find out what a woman thinks of you?

Marry her.

"And how much would you say this colt was worth?" asked the railroad claim agent of the farmer.

"Not a cent less than $500," emphatically declared that sturdy son of the soil.

"Pedigreed stock, I suppose?"

"Well, no," the bereaved admitted reluctantly. "But you never could judge a colt like that by its parents."

"No," the attorney agreed dryly. "I've often noticed how crossing it with a locomotive will improve a breed."

"What time does the next train come in?" asked Edward, aged six, of the old rural station agent.

"Why, you little rascal, I've told you five times before that it comes in at 4:44."

"I know it," replied Edward, "but I like to see your whiskers wobble when you say 4:44."

"Mose," said the judge sternly, "you are found guilty of having stolen two chickens from Mr. Harrison's coop last week. The fine will be $5."

"Yessuh, jedge," said Mose, placing a $10 bill on the clerk's desk. "Ah's giving yo' 10 bucks which will pay yo' up to an' includin' nex' Sattidy night."

Do you think what Darwin says about our ancestors is true?

I think it is true about your ancestors.

"I want a revolver—for my husband."

"Did your husband say what make of revolver?"

"No, but I don't think that matters. He doesn't even know I'm going to shoot him."

I suppose you were disappointed that your last baby wasn't a boy?

No, indeed! When I think that women now vote, smoke, go anywhere, wear whatever clothes they like, if any, and that men can't even have a glass of beer any more, I'm satisfied.

Proven Performance Stands Back of

--The Appleman Bit

Weed No. 13 Spindletop, was drilled to 4684 feet. 33 APPLEMAN GUMBO BITS were used with an average of 142 feet per bit; power cost per foot 7 cents.

McLean No. 19 was drilled to 4718 feet in 254 hours, making an average of over 18 feet per hour. 33 APPLEMAN GUMBO BITS were used with an average of 7 hours 41 minute per bit and 143 feet per bit.

Figures such as these testify to the unusual performance which the APPLEMAN BIT gives, proving it to be one of the most economical and speedy bits ever to be manufactured.

Write for complete information

B.K. APPLEMAN
BEAUMONT, TEXAS

THE

Chicago & Alton Railroad

operates

8 FINE TRAINS

Between

ST. LOUIS & CHICAGO

Lv. St. Louis	6:45 AM	8:55 AM	12:05 PM	2:00 PM	3:30 PM	9:00 PM	11:45 PM	11:59 PM
Ar. Chicago	4:45 PM	3:25 PM	6:35 PM	9:00 PM	10:00 PM	7:00 AM	6:45 AM	7:45 AM

"An Alton Train Ready When You Are"

Direct connections made at St. Louis with all trains from the South and Southwest.

THE PATRONAGE OF THE OIL INDUSTRY WILL BE APPRECIATED

EARL J. MARQUETTE, D.P.A.
1023 Post-Dispatch Bldg. Houston, Texas

Mills Bull Plugs

More Dependable Under High Pressure

Mills Standard 3″, 4″ and 6″ plugs are 6500 lbs. cold water pressure tested in random lots before shipment. Highest quality, seamless A.P.I. material, extreme accuracy in manufacture and special features make Mills Bull Plugs more dependable in operation. Request bulletin showing chart of bursting and working pressures.

MILLS IRON WORKS, INC.
LOS ANGELES, CALIF.
Texas Office:
PAUL REID, *Manager*
Merchants & Manufacturers Bldg.
HOUSTON, TEXAS

Buckeye *Wheel-Type* . . . . . Ditchers Preferred

In the oil and gas fields, more of these popular ditchers are engaged than all other makes combined. Many large pipe line contractors use them exclusively.

Good reasons exist for this uniformly decided preference. Voluntarily, enthusiastic contractors and operators say of their Buckeyes: "*Does good work and stands up under heavy loads*"; "*52 miles in 68 days*"; "*All our machines are Buckeyes*"; and "*Superior performance in oil field requirements.*"

Wheel-type ditchers as built by Buckeye now, and for over 30 years, offer many exclusive advantages. Included in their distinguishing mechanical features are: Accurate grading ability, producing a clean, finished trench; *all-steel* construction; heavy, substantial main frame; slow-speed, industrial type motor; the rugged digging wheel which made Buckeye famous; multiple digging speeds, quickly shifted; Alligator (crawler) wheels with traction brakes; and strictly one-man operation.

There is a *wheel-type* Buckeye for every pipe line ditching requirement. Cutting widths range from 11½″ to 40″ and depths to 7½′. *Service* Backfillers and *Utility* Backfiller-Cranes are efficient, profitable companions for these ditchers.

Ask for our attractive and interesting new catalog. "BUCKEYE — *The Pipe Liner.*" It contains specifications, working views and performance data of special interest to all pipe line engineers and contractors.

The Buckeye Traction Ditcher Co.
FINDLAY, OHIO

There's a Buckeye Sales and Service Office near You

for over thirty years Buckeye

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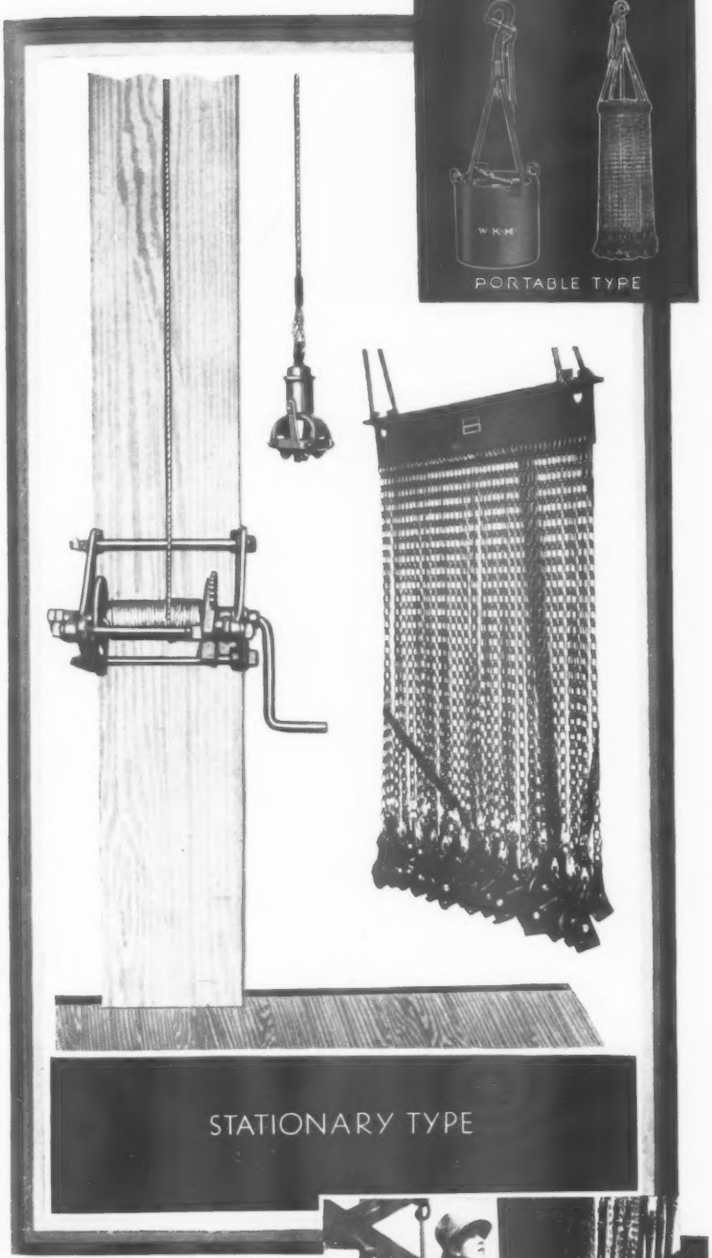
EIGHT GENUINE ADVANTAGES

of

W-K-M SUCKER ROD HANGERS



Typical installation of Stationary Type with all units in their relative position.

Operator releasing the elevator as it passes him on the way down. Hanger clamp has taken weight of the stand.

By using W-K-M Sucker Rod Hangers you gain eight important advantages; (1) A 30 per cent saving in handling time; (2) Absolute prevention of kinking rods; (3) Rods free of dirt and grit which ordinarily work down into cups and plungers; (4) Elimination of tubing wear due to kinked rods; (5) Fishing jobs reduced to a minimum; (6) Danger of slippery rod walks avoided; (7) Elimination of expense in building rod rack; (8) Rod handling which is much easier and quicker for the crew!

W-K-M Sucker Rod Hangers are made in two types, Portable and Stationary. The Portable Type is easily carried from well to well by the crew, and can be hoisted into position in the derrick in two minutes. The Stationary Type is designed for permanent installation in the derrick.

By filling out the coupon below, full information and pictures will be sent post haste!

Name .....

Company .....

Address .....

W-K-M Company, Inc.

OIL FIELD, PIPE-LINE & INDUSTRIAL EQUIPMENT

HOUSTON, Texas, U. S. A.

Export Office: 74 Trinity Place, New York

Cable Address "WILKOMAC"

TULSA: 1105 Hunt Bldg. CHICAGO: 917 Engineering Bldg.

Only a few years ago it was necessary to depend on an iron pipe line valve to close in a well. It was a "make shift" piece of equipment—and the results were far from satisfactory.

After a thorough survey of the Industry's needs, Hughes Tool Company Engineers designed a Chrome-Nickel Steel Drilling Valve capable of giving satisfactory performance under extreme working conditions.

The value of this valve was so evident that other leading manufacturers soon duplicated its design—and in so doing, joined with operators and contractors throughout the world in complimenting another service achievement of Hughes Tool Company.

However, only in Hughes Valves can the purchaser obtain the Hughes standard of material and skilled workmanship—major factors in giving to the finished product its superior performance qualities.

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